DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0487; Directorate Identifier 2014-NM-026-AD; Amendment 39-18226; AD 2015-16-01]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2012-19-11 for certain The Boeing Company Model 737 airplanes. AD 2012-19-11 required incorporating design changes to improve the reliability of the cabin altitude warning system by installing a redundant cabin altitude pressure switch, replacing the aural warning module (AWM) with a new or reworked AWM, and changing certain wire bundles or connecting certain previously capped and stowed wires as necessary. For certain airplanes, AD 2012-19-11 also required prior or concurrent incorporation of related design changes by modifying the instrument panels, installing light assemblies, modifying the wire bundles, and installing a new circuit breaker, as necessary. This AD was prompted by the report of a flightcrew not receiving an aural warning during a lack-of-cabin pressurization event. We are issuing this AD to prevent the loss of cabin altitude warning, which could delay flightcrew recognition of a lack of cabin pressurization, and could result in incapacitation of the flightcrew due to hypoxia (a lack of oxygen in the body), and consequent loss of control of the airplane.

DATES: This AD is effective September 15, 2015.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of September 15, 2015.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of November 7, 2012 (77 FR 60296, October 3, 2012).

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.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-2014-0487; 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.


SUPPLEMENTARY INFORMATION:

Discussion


The NPRM was prompted by the report of a flightcrew not receiving an aural warning during a lack of cabin pressurization event. The NPRM proposed to continue to require incorporating design changes to improve the reliability of the cabin altitude warning system by installing a redundant cabin altitude pressure switch, replacing the AWM with a new or reworked AWM, and changing certain wire bundles or connecting certain previously capped and stowed wires as necessary.

For certain airplanes, the NPRM proposed to continue to require prior or concurrent incorporation of related design changes by modifying the instrument panels, installing light assemblies, modifying the wire bundles, and installing a new circuit breaker, as necessary. The NPRM also proposed to require, for certain airplanes, incorporating related design changes. The NPRM also proposed, for certain airplanes, to no longer give credit for the prior accomplishment of certain actions. We are issuing this AD to prevent the loss of cabin altitude warning, which could delay flightcrew recognition of a lack of cabin pressurization, and could result in incapacitation of the flightcrew due to hypoxia (a lack of oxygen in the body), and consequent loss of control of the airplane.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 43983, July 29, 2014) and the FAA's response to each comment.

Request To Use the Latest Service Information

Boeing requested that the proposed rule (79 FR 43983, July 29, 2014) incorporate Boeing Special Attention Service Bulletin 737-21-1165, Revision 3, dated July 16, 2014, and Boeing Alert Service Bulletin 737-31A1325, Revision 2, dated June 5, 2014. Boeing stated that it has released new service information and the service information should be reflected in the proposed rule.

We agree with the commenter's request to reference the latest service information. We have revised this final rule accordingly.
Boeing Alert Service Bulletin 737-31A1325, Revision 2, dated June 5, 2014, updates reference document names, corrects typographical errors, and includes airplanes that were removed in error in an earlier revision of the service information. The procedures remain unchanged. In addition, we have added paragraph (j)(2) of this AD, to give credit for previous actions, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010, and Boeing Alert Service Bulletin 737-31A1325, Revision 1, dated July 5, 2012.

Boeing Special Attention Service Bulletin 737-21-1165, Revision 3, dated July 16, 2014, includes configuration differences found by operators during incorporation of earlier revisions of the service information. The procedures otherwise remain unchanged.

Request To Add an Exception to the Proposed Rule (79 FR 43983, July 29, 2014)

An anonymous commenter requested to add an exception to the proposed rule (79 FR 43983, July 29, 2014). The commenter stated that paragraphs (j)(2) and (j)(3) of the proposed AD should include the same exceptions for group 24 through 25 airplanes, and group 27 through 33 airplanes, as identified in Boeing Alert Service Bulletin 737-31A1322, Revision 4, dated October 31, 2013.

The commenter also stated that paragraphs (i)(2) and (i)(3) of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), did not give credit for previous actions for group 24 through 25 airplanes, and group 27 through 33 airplanes, as identified in Boeing Alert Service Bulletin 737-31A1322, Revision 3, dated March 28, 2012. The commenter stated that this is because paragraph 1.C. of Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012, explicitly states that changes given in figures 48 through 50 affect wiring changes previously accomplished in Boeing Service Bulletin 737-24A1141; also figures 15 through 17, and airplane line numbers 1 through 740, are moved to a new group 24 through 25 airplanes, and group 27 through 33 airplanes.

The commenter stated that if an airplane is identified in groups 24 through 25 airplanes, and group 27 through 33 airplanes, of Boeing Alert Service Bulletin 737-31A1322, Revision 4, dated October 31, 2013, the operator can take credit for previous actions accomplished using Boeing Alert Service Bulletin 737-31A1322, Revision 2, dated August 18, 2011, and Boeing Alert Service Bulletin 737-31A1322, Revision 1, dated June 24, 2010. Therefore, the commenter stated that the operator must, per the exceptions of paragraphs (i)(2) or (i)(3) of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), re-comply with the proposed AD once the additional actions are taken.

We disagree with the commenter's request. This AD corrects an error in paragraph (i) of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012). In AD 2012-19-11, airplanes were identified incorrectly as having wiring instructions that may conflict with the corrective actions of AD 2009-16-07, Amendment 39-15990 (74 FR 41607, August 18, 2009). Further, this AD supersedes (i.e., "replaces") AD 2012-19-11, and therefore compliance is required with this new AD only. In addition, there are still exclusions in this AD, but they are now identified by line numbers—not by groups—as shown in paragraphs (j)(1)(ii) and (j)(1)(iii) of this AD. We have not changed this AD in this regard.

Request To Extend the Compliance Time

United Airlines (UAL) requested that the compliance time for the proposed rule (79 FR 43983, July 29, 2014) be extended a minimum of 1 year for all airplanes. UAL stated that this is due to the increased scope of required testing not documented in Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, as revised by Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012. UAL commented that Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012, is for the removal of the junction box 46, and additional administrative time is required during the accomplishment of each airplane for obtaining an alternate method of compliance (AMOC).

UAL commented that due to the removal of junction box 46, 43 additional operational checks must be accomplished and are estimated to take an additional 30 hours of elapsed time for each
airplane. UAL stated that the estimated costs of the proposed rule (79 FR 43983, July 29, 2014) should be revised to include an additional 30 hours for testing.

UAL also stated that multiple AMOCs have been required for the concurrent requirements and for airplanes affected by AD 2013-02-05, Amendment 39-17326 (78 FR 6202, January 30, 2013) due to errors in the Boeing data. UAL stated that the time necessary to seek approved AMOCs extends the completion time of each airplane beyond the time allotted in the estimated costs and can result in the airplanes being out of service.

We disagree with the commenter's request. Boeing has provided its work estimates based on average times for accomplishing its service information specifically to correct the unsafe condition. The time spent to perform additional functional checks and testing to systems incidentally associated with the unsafe condition in this AD and any associated administrative actions in carrying out all work (related to this AD) will vary among operators. Additionally, we do not consider the time spent processing AMOCs when we determine estimated costs of an AD because of the variable occurrences, scope of technical deviations, and elective nature of many AMOC requests.

The estimate of labor hours provides only a guideline for operators, and operators are encouraged to review all relevant work steps to create time and cost estimates specific to their schedules and work processes. Operators that request AMOCs while their airplane is in maintenance do not have to wait for the Seattle Aircraft Certification Office (ACO) approval before they can return the airplane to service, provided the 72-month compliance time has not passed, and operators do not claim compliance credit in their maintenance records until the AMOC is received. As long as the 72-month compliance time has not been exceeded, an AMOC is not needed; therefore, requests for compliance time extensions and Seattle ACO responses to early AMOC requests have no effect on returning an airplane to service from an operator's maintenance cycle.

We base AD compliance times primarily on our assessment of safety risk. We consider the overall risk to the fleet, including the severity of the failure and the likelihood of the failure's occurrence in development of the compliance time for the ADs. We work with the respective manufacturers to ensure that all appropriate instructions and parts are available at the appropriate time to meet our collective safety goals, and that those goals are based on safety of the fleet. We have not changed this AD in this regard.

Effect of Winglets on AD

Aviation Partners Boeing stated that the installation of winglets per STC ST01219SE or ST00830SE does not affect the accomplishment of the manufacturer's service instructions.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 43983, July 29, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 43983, July 29, 2014).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information Under 1 CFR Part 51

We reviewed the following service information:

The service information describe procedures for incorporating design changes to improve the reliability of the cabin altitude warning system by installing a redundant cabin altitude pressure switch, replacing the AWM with a new or reworked AWM, and changing certain wire bundles or connecting certain previously capped and stowed wires as necessary. 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 1,618 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>Install a redundant cabin altitude pressure switch, replace the AWM with a new or reworked AWM, change certain wire bundles or connect certain capped and stowed wires [retained actions from AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), for 1,618 airplanes]</td>
<td>Up to 62 work-hours × $85 per hour = up to $5,270</td>
<td>$33,576</td>
<td>Up to $38,846</td>
<td>Up to $62,852,828</td>
</tr>
<tr>
<td>Modify the instrument panels, install light assemblies, modify the wire bundles, and install a new circuit breaker (concurrent requirements) [retained actions from AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), for 1,596 airplanes]</td>
<td>Up to 92 work-hours × $85 per hour = up to $7,820</td>
<td>5,292</td>
<td>Up to $13,112</td>
<td>Up to $20,926,752</td>
</tr>
<tr>
<td>Modify the instrument panels, install light assemblies, modify the wire bundles, and install a new circuit breaker (concurrent requirements) [new actions for 22 airplanes]</td>
<td>Up to 92 work-hours × $85 per hour = up to $7,820</td>
<td>5,292</td>
<td>Up to $13,112</td>
<td>Up to $288,464</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 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 have determined that 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 removing Airworthiness Directive (AD) 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), and adding the following new AD:
2015-16-01 The Boeing Company: Amendment 39-18226; Docket No. FAA-2014-0487; Directorate Identifier 2014-NM-026-AD.

(a) Effective Date

This AD is effective September 15, 2015.

(b) Affected ADs

This AD replaces AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012).

(c) Applicability

This AD applies to The Boeing Company airplanes, certificated in any category, as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model 737-100, -200, -200C, -300, –400, and -500 series airplanes, as identified in Boeing Special Attention Service Bulletin 737-21-1164, Revision 2, dated August 23, 2013.


(d) Subject

Air Transport Association (ATA) of America Code 21, Air Conditioning.

(e) Unsafe Condition

This AD was prompted by the report of a flightcrew not receiving an aural warning during a lack of cabin pressurization event. We are issuing this AD to prevent the loss of cabin altitude warning, which could delay flightcrew recognition of a lack of cabin pressurization, and could result in incapacitation of the flightcrew due to hypoxia (a lack of oxygen in the body), and consequent loss of control of the airplane.

(f) Compliance

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

(g) Retained Installation

This paragraph restates the actions required by paragraph (g) of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), with revised service information. Within 72 months after November 7, 2012 (the effective date of AD 2012-19-11), install a redundant cabin altitude pressure switch, replace the aural warning module (AWM) with a new or reworked AWM, and change certain wire bundles or connect certain capped and stowed wires, as applicable, in accordance with the Accomplishment Instructions of the applicable service information in paragraphs (g)(1) and (g)(2) of this AD; except as provided by paragraph (k)(1) of this AD.
(1) Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012; or Boeing Special Attention Service Bulletin 737-21-1164, Revision 2, dated August 23, 2013 (for Model 737-100, -200, -200C, -300, -400, and -500 series airplanes). As of the effective date of this AD, use Boeing Special Attention Service Bulletin 737-21-1164, Revision 2, dated August 23, 2013, for the actions specified in paragraph (g) of this AD.


(h) Retained Concurrent Actions

This paragraph restates the concurrent actions required by paragraph (h) of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), with revised service information. For airplanes identified in Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010 (for Model 737-100, -200, -200C, -300, -400, and -500 series airplanes); and Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012 (for Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes); except as provided by paragraph (i) of this AD: Before or concurrently with accomplishment of the actions specified in paragraph (g) of this AD, as applicable, modify the instrument panels, install light assemblies, modify the wire bundles, and install a new circuit breaker, in accordance with the Accomplishment Instructions of the applicable service information in paragraphs (h)(1) and (h)(2) of this AD; except as provided by paragraph (k)(2) of this AD.

(1) The service information for Model 737-100, -200, -200C, -300, -400, and -500 series airplanes as identified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii), of this AD. As of the effective date of this AD, use Boeing Alert Service Bulletin 737-31A1325, Revision 2, dated June 5, 2014 (for Model 737-100, -200, -200C, -300, -400, and -500 series airplanes), for the actions specified in paragraph (h) of this AD.


(ii) Boeing Alert Service Bulletin 737-31A1325, Revision 1, dated July 5, 2012.


(2) Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012; or Boeing Alert Service Bulletin 737-31A1332, Revision 4, dated October 31, 2013 (for Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes). As of the effective date of this AD, use Boeing Alert Service Bulletin 737-31A1332, Revision 4, dated October 31, 2013 (for Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes), for the actions specified in paragraph (h) of this AD.

(i) New Concurrent Requirement

For airplanes having variable numbers YA001 through YA008 inclusive, YA251, YA501 through YA508 inclusive, and YC321 through YC325 inclusive: Before or concurrently with accomplishment of the actions specified in paragraph (g) of this AD, or within 18 months after the effective date of this AD, whichever occurs later, modify the instrument panels, install light assemblies, modify the wire bundles, and install a new circuit breaker, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-31A1332, Revision 4, dated October 31, 2013.
(j) Credit for Previous Actions

(1) This paragraph restates the credit for previous actions stated in paragraph (i) of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), with correct paragraph reference and revised exempted airplanes.

(i) This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before November 7, 2012 (the effective date of AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012)), using Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, which was incorporated by reference in AD 2012-19-11.

(ii) For airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010; except airplanes having variable numbers YA001 through YA019 inclusive, YA201 through YA203 inclusive, YA231 through YA242 inclusive, YA251, YA252, YA271, YA272, YA301, YA302, YA311, YA312, YA501 through YA508 inclusive, YA541, YA701, YA702,YC001 through YC007 inclusive, YC051, YC052, YC101, YC102, YC111, YC121, YC301, YC302, YC321 through YC330 inclusive, YC381, YC401 through YC403 inclusive, YC501, YC502, and YE001 through YE003 inclusive: This paragraph provides credit for the actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010, which was incorporated by reference in AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012).

(iii) For airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; except airplanes identified in paragraph (j)(4) of this AD and airplanes having variable numbers YA001 through YA019 inclusive, YA201 through YA203 inclusive, YA231 through YA242 inclusive, YA251, YA252, YA271, YA272, YA301, YA302, YA311, YA312, YA501 through YA508 inclusive, YA541, YA701, YA702, YC001 through YC007 inclusive, YC051, YC052, YC101, YC102, YC111, YC121, YC301, YC302, YC321 through YC330 inclusive, YC381, YC401 through YC403 inclusive, YC501, YC502, and YE001 through YE003 inclusive: This paragraph provides credit for the actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011, which was incorporated by reference in AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012).

(iv) For Group 21, Configuration 2 airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012: This paragraph provides credit for the actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011, which was incorporated by reference in AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012); and provided that the actions specified in Boeing Service Bulletin 737-21-1171, dated February 12, 2009 (which is not incorporated by reference in this AD), were accomplished prior to or concurrently with the actions specified in Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011.

(2) This paragraph provides credit for the actions specified in paragraph (h) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraph (j)(2)(i) or (j)(2)(ii) of this AD.


(ii) Boeing Alert Service Bulletin 737-31A1325, Revision 1, dated July 5, 2012, which is not incorporated by reference in this AD.

(k) New Requirements to This AD: Exceptions to the Service Information

(1) Where Boeing Special Attention Service Bulletin 737-21-1164, Revision 2, dated August 23, 2013, specifies to contact Boeing for instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.
Where Boeing Alert Service Bulletin 737-31A1325, Revision 2, dated June 5, 2014, specifies to contact Boeing for instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(l) Alternative Methods of Compliance (AMOCs)

The Manager, Seattle 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 paragraph (m)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-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.

An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

AMOCs approved for AD 2012-19-11, Amendment 39-17206 (77 FR 60296, October 3, 2012), are approved as AMOCs for the corresponding provisions of this AD.

(m) Related Information

For more information about this AD, contact Francis Smith, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6596; fax: 425-917-6590; email: Francis.Smith@faa.gov.

Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (n)(5) and (n)(6) of this AD.

(n) Material Incorporated by Reference

The following service information was approved for IBR on September 15, 2015.

(i) Boeing Alert Service Bulletin 737-31A1325, Revision 2, dated June 5, 2014.

The following service information was approved for IBR on November 7, 2012 (77 FR 60296, October 3, 2012).

(iii) Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011.
(v) Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012.
(5) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(6) 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.

(7) 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 22, 2015.
Victor Wicklund,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.