DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-2962; Directorate Identifier 2015-NM-071-AD; Amendment 39-18221; AD 2012-11-09 R1]

RIN 2120-AA64

Airworthiness Directives; Various Transport Category Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are revising Airworthiness Directive (AD) 2012-11-09 for certain transport category airplanes. AD 2012-11-09 required either activating all chemical oxygen generators in the lavatories until the generator oxygen supply is expended, or removing the oxygen generator(s); and, for each chemical oxygen generator, after the generator is expended (or removed), removing or restowing the oxygen masks and closing the mask dispenser door. AD 2012-11-09 also required installing a supplemental oxygen system in affected lavatories, which terminated the requirements of AD 2012-11-09. This AD clarifies a certain restriction by providing a broader method of compliance. This AD was prompted by the discovery that the requirement to change the instructions for continued airworthiness under certain conditions may impose an unnecessary burden on operators. We are issuing this AD to eliminate a hazard that could jeopardize flight safety, and to ensure that all lavatories have a supplemental oxygen supply.

DATES: This AD is effective July 27, 2015. We must receive any comments on this AD by September 10, 2015.

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

- Fax: 202-493-2251.
• 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 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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-2015-2962; 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 street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Jeff Gardlin, Aerospace Engineer, Airframe and Cabin Safety Branch, ANM-115, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-227-2136; fax: 425-227-1149; email: jeff.gardlin@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On May 23, 2012, we issued AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), for certain transport category airplanes. AD 2012-11-09 superseded AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011). AD 2012-11-09 required either activating all chemical oxygen generators in the lavatories until the generator oxygen supply is expended, or removing the oxygen generator(s); and, for each chemical oxygen generator, after the generator is expended (or removed), removing or restowing the oxygen masks and closing the mask dispenser door. AD 2012-11-09 also required installing a supplemental oxygen system in affected lavatories, which terminated the requirements of AD 2011-04-09. AD 2012-11-09 was prompted by reports that the design of the oxygen generators presented a hazard that could jeopardize flight safety. We issued AD 2012-11-09 to eliminate a hazard that could jeopardize flight safety, and to ensure that all lavatories have a supplemental oxygen supply.

Actions Since Issuance of AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012)

Since we issued AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), we have discovered that a certain requirement might have imposed an unnecessary burden on Boeing and operators. Paragraph (l)(2) of AD 2012-11-09 required adding “an airworthiness limitation that prohibits the installation of chemical oxygen generators in lavatories” to the operator's maintenance program, if compliance with AD 2012-11-09 was shown without a chemical oxygen generator. The intent of this provision was to have a mechanism in place in the operators' maintenance programs that prevents the inadvertent reinstallation of a chemical oxygen generator in a lavatory.

That use of the term “airworthiness limitation” could be interpreted as the Airworthiness Limitations section of the Instructions for Continued Airworthiness (ICA), as required by section 25.1529 of the Federal Aviation Regulations (14 CFR 25.1529). While that is an acceptable method of compliance, the FAA did not intend to compel that specific method of compliance. We have therefore revised paragraph (l)(2) of this AD to remove the “airworthiness limitation” restriction and to instead prohibit installation of a chemical oxygen generator in a lavatory. We are issuing this AD to correct the unsafe condition on certain transport category airplanes.
**FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

**AD Requirements**

This AD continues to require the actions specified in AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012). This AD clarifies a certain restriction by providing a broader method of compliance.

**FAA's Justification and Determination of the Effective Date**

The change provided in this AD clarifies the intent of a certain requirement of AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), by providing a broader method of compliance for the “airworthiness limitation" restriction described previously. Therefore, we find that notice and opportunity for prior public comment are unnecessary and that good cause exists for making this amendment effective in less than 30 days.

**Approval Process for AD Compliance Using Chemical Oxygen Generators (COGs)**

Because of the issues addressed by AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), COG installations will require new considerations in order to be found acceptable as methods of compliance with this AD. The approval for COG installations will therefore be in accordance with a method approved by the FAA as discussed below.

**Approval Process for AD Compliance, Using Other Systems**

Chemical oxygen generators are one type of system used to provide supplemental oxygen. While the majority of transport category airplanes use this system in lavatories, there are other systems as well. If another system type is used to meet the requirements of this AD, the original unsafe condition is not a concern. In that case, the means of compliance is straightforward, and we have determined that the approval method could be more flexible than is usually the case for an AD. For example, delegated organizations cannot normally make compliance findings for ADs; service information associated with ADs must be adhered to exactly, or else an alternative method of compliance (AMOC) must be approved.

For this AD, if the type of system is other than a COG, then we have determined that these restrictions could be relaxed. Therefore, paragraph (l)(2) of this AD contains provisions to permit existing approval processes to be used, as long as the means of compliance is other than a COG. This provision takes precedence over current limitations in operators' authority to use their organizational delegations when showing compliance with an AD. In addition, if an operator uses service information that is approved for such installations, deviations from the service information can be addressed using the operator's normal procedures without requiring an AMOC.

**Oversight Office**

Paragraph (l) of this AD refers to the FAA oversight office responsible for approval of modifications used to show compliance. This will typically be the aircraft certification office having geographic oversight of the applicant. In the case of service instructions from design approval holders of other countries, this would be the FAA, Transport Airplane Directorate (Transport Standards
Staff). We anticipate that modifications to meet this AD will require either supplemental type certificate or amended type certificate approval.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments before it becomes effective. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2015-2962 and directorate identifier 2015-NM-071-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of 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 AD.

Costs of Compliance

We estimate that this AD affects 5,500 airplanes of U.S. registry. This new AD imposes no additional economic burden. The current costs for this AD are repeated for the convenience of affected operators, as follows:

<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>Activate COG/expend oxygen supply</td>
<td>Up to 2 work-hours × $85 per hour = up to $170</td>
<td>$0</td>
<td>Up to $170</td>
<td>Up to $935,000.</td>
</tr>
<tr>
<td>[retained actions from AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012)]</td>
<td></td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygen system installation</td>
<td>24 work-hours × $85 per hour = $2,040</td>
<td>$6,000</td>
<td>$8,040</td>
<td>$44,220,000.</td>
</tr>
<tr>
<td>[retained action from AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012)]</td>
<td></td>
<td></td>
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<td></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

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 part 39 of the Federal Aviation Regulations (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) 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), and adding the following new AD:
2012-11-09 R1 Transport Category Airplanes: Amendment 39-18221; Docket No. FAA-2015-2962; Directorate Identifier 2015-NM-071-AD.

(a) Effective Date

This AD is effective July 27, 2015.

(b) Affected ADs

This AD revises AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012).

(c) Applicability

This AD applies to transport category airplanes, in passenger-carrying operations, as specified in paragraph (c)(1) or (c)(2) of this AD.

(1) Airplanes that complied with the requirements of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011).

(2) Airplanes equipped with any chemical oxygen generator installed in any lavatory and are:
   (i) Operating under part 121 of the Federal Aviation Regulations (14 CFR part 121); or
   (ii) U.S. registered and operating under part 129 of the Federal Aviation Regulations (14 CFR part 129), with a maximum passenger capacity of 20 or greater.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Unsafe Condition

This AD was prompted by the determination that the current design of chemical oxygen generators presents a hazard that could jeopardize flight safety and the discovery that certain existing requirements could impose an unnecessary burden on operators. We are issuing this AD to eliminate a hazard that could jeopardize flight safety, and to ensure that all lavatories have a supplemental oxygen supply.

(f) Compliance

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

(g) Retained Requirements for the Oxygen Generator, With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), with no changes. Within 21 days after March 14, 2011 (the effective date of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011)), do the actions specified in paragraphs (g)(1) and (g)(2) of this AD.
(1) Activate all chemical oxygen generators in the lavatories until the generator oxygen supply is expended. An operator may also remove the oxygen generator(s), in accordance with existing maintenance practice, in lieu of activating it.

(2) For each chemical oxygen generator, after the generator is expended (or removed), remove or re-stow the oxygen masks and close the mask dispenser door.

Note 1 to paragraph (g) of this AD: Design approval holders are not expected to release service instructions for the actions specified in paragraph (g) of this AD.

(h) Retained Information About Hazardous Material, With a Change to the Identification of the Code of Federal Regulations Citation

This paragraph restates the information in Note 1 of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), with a change to the identification of the Code of Federal Regulations citation. Chemical oxygen generators are considered a hazardous material and subject to specific requirements under Title 49 of the Code of Federal Regulations (49 CFR) for shipping. Oxygen generators must be expended prior to disposal but are considered a hazardous waste; therefore, disposal must be in accordance with all Federal, State, and local regulations. Expended oxygen generators are forbidden in air transportation as cargo. For more information, contact 1-800-467-4922.

(i) Retained Compliance With Federal Aviation Regulations of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), With No Changes

This paragraph restates the requirements of paragraph (h) of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), with no changes. Notwithstanding the requirements of sections 25.1447, 121.329, 121.333, and 129.13 of the Federal Aviation Regulations (14 CFR 25.1447, 121.329, 121.333, and 129.13), operators complying with this AD are authorized to operate affected airplanes until accomplishment of the actions specified in paragraph (l) of this AD.

(j) Retained Parts Installation Limitation of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), With No Changes

This paragraph restates the requirements of paragraph (i) of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), with no changes. After March 14, 2011 (the effective date of AD 2011-04-09), and until accomplishment of the actions specified in paragraph (l) of this AD, no person may install a chemical oxygen generator in any lavatory on any affected airplane.

(k) Retained Prohibition of Special Flight Permit of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), With No Changes

This paragraph restates the requirements of paragraph (j) of AD 2011-04-09, Amendment 39-16630 (76 FR 12556, March 8, 2011), with no changes. 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 for the accomplishment of the actions specified in paragraph (g) of this AD.

(l) Retained Oxygen System Restoration, With Revised Restriction in Paragraph (l)(2) of This AD With a Change to the Identification of the Federal Aviation Regulations Citations in Paragraphs (l)(2) and (l)(2)(i) of This AD

This paragraph restates the requirements of paragraph (l) of AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), with a revised restriction in paragraph (l)(2) of this AD and
with a change to the identification of the Federal Aviation Regulations citations in paragraphs (l)(2) and (l)(2)(i) of this AD. Within 37 months after August 10, 2012 (the effective date of AD 2012-11-09), install a supplemental oxygen system that meets all applicable sections of parts 25 and 121 of the Federal Aviation Regulations (14 CFR part 25 and 14 CFR part 121) in each lavatory, as specified in paragraph (l)(1) or (l)(2) of this AD, as applicable.

(1) If compliance with paragraph (l) of this AD is achieved using a chemical oxygen generator, the actions specified in paragraph (l) of this AD must be done in accordance with a method approved by the Manager of the responsible FAA oversight office having responsibility over the modification. For a method to be approved, it must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(2) If compliance with paragraph (l) of this AD is achieved without a chemical oxygen generator, the specifications of paragraphs (l)(2)(i) and (l)(2)(ii) of this AD apply. Any repairs or alterations to a system installed and approved in accordance with this paragraph may be accomplished in accordance with part 43 of the Federal Aviation Regulations (14 CFR part 43). The installation of chemical oxygen generators is prohibited unless approved in accordance with the requirements of paragraph (l)(1) of this AD.

(i) The modification must receive FAA approval in accordance with part 21 of the Federal Aviation Regulations (14 CFR part 21) as a major design change. Notwithstanding operations specification restrictions to the contrary, organizational approval holders may exercise their full authority in approving installations that meet the installation requirements of this AD.

(ii) Deviation from approved service instructions and subsequent modifications may be handled by normal operator procedures without requiring approval of an alternative method of compliance.

(m) Retained Minimum Equipment List (MEL) Provisions, With a Change to the Identification of the Federal Aviation Regulations Citations

This paragraph restates the provision specified in paragraph (m) of AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), with a change to the identification of the Federal Aviation Regulations citations. Notwithstanding the requirements of sections 121.628(b)(2) and 129.14 of the Federal Aviation Regulations (14 CFR 121.628(b)(2) and 14 CFR 129.14), the equipment required by paragraph (l) of this AD may be included in the MEL, as applicable.

(n) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Transport Standards Staff, ANM-110, 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 Transport Standards Staff, send it to the attention of the person identified in paragraph (o) 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) AMOCs approved previously for AD 2012-11-09, Amendment 39-17072 (77 FR 38000, June 26, 2012), are approved as AMOCs for the corresponding provisions of this AD.

(o) Related Information

For more information about this AD, contact Jeff Gardlin, Aerospace Engineer, Airframe and Cabin Safety Branch, ANM-115, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-227-2136; fax: 425-227-1149; email: jeff.gardlin@faa.gov.
(p) Material Incorporated by Reference

None.

Issued in Renton, Washington, on July 17, 2015.
Jeffrey E. Duven,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.