DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0439; Product Identifier 2017-CE-010-AD; Amendment 39-19021; AD 2017-18-12]

RIN 2120-AA64

Airworthiness Directives; B/E Aerospace Protective Breathing Equipment Part Number 119003-11 and Part Number 119003-21

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2016-11-20 for certain B/E Aerospace protective breathing equipment (PBE) that is installed on airplanes. AD 2016-11-20 required replacing part number (P/N) 119003-11 PBE units. Since we issued AD 2016-11-20, we received a report that PBE units, P/N 119003-21, within a certain serial number range are made with candle tube material determined to have a low yield strength and may be volatile upon use or disposal. This AD retains the actions required in AD 2016-11-20 and requires inspecting and replacing P/N 119003-11 and 119003-21 PBE units. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
The Director of the Federal Register approved the incorporation by reference of certain other publication listed in this AD as of July 15, 2016 (81 FR 37492, June 10, 2016).

**ADDRESSES:** For service information identified in this final rule, contact B/E Aerospace, Inc., Commercial Aircraft Products Group, 10800 Plumm Road, Lenexa, Kansas 66215; phone: (913) 338-9800; fax: (913) 338-8419; Internet: www.beaerospace.com. You may view this service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0439.

**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-2017-0439; 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 final rule, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document 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:** David Enns, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 S. Airport Road, Room 100, Wichita, Kansas 67209; phone: (316) 946-4147; fax: (316) 946-4107; email: david.enns@faa.gov.
SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2016-11-20, Amendment 39-18547 (81 FR 37492, June 10, 2016), (“AD 2016-11-20”), for B/E Aerospace protective breathing equipment (PBE), part number (P/N) 119003-11, that is installed on airplanes. The NPRM published in the Federal Register on May 26, 2017 (82 FR 24260). The NPRM was prompted by a report that PBE units, P/N 119003-21, within a certain serial number range are made with candle tube material determined to have a low yield strength and may be volatile upon use or disposal. The NPRM proposed to retain the actions required in AD 2016-11-20 and would require inspecting and replacing P/N 119003-11 and 119003-21 PBE units. We are issuing this AD to correct the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Request to Include Additional Compliance Method for Paragraph (i) of This AD

David White, of NetJets Aviation, requested that the action required in paragraph (i) of this AD for determining the serial number of the installed PBE, P/N 119003-21, also include a maintenance records review.

The commenter stated that if the maintenance records are available and the determination can positively be made, this review will save the owners/operators time and money.

We agree with the commenter and have changed this AD based on this comment.
Request for Clarification of Compliance Time for Paragraph (j) of This AD

David White, of NetJets Aviation, requested that the compliance time in paragraph (j) of this AD to be clarified.

The commenter stated that paragraph (j) of this AD requires replacement of an affected mask before further flight or following existing minimum equipment list (MEL) procedures, but it does not identify if compliance is required at the earlier or the later of the two thresholds.

We do not agree with commenter. The MEL is a document and method airplane operators use to obtain relief from Federal Aviation Regulations that requires all equipment installed on the airplane be operative at the time of flight. It is airplane-specific and spells out which pieces of equipment may be inoperable along with any procedures that are required for an airplane to operate under specific conditions while maintaining airworthiness. The reference to MEL is a reminder that, depending on the airplane and its MEL, it may be acceptable to remove the affected units and continue to operate with a reduced number of PBEs as stated in the specific MEL. The affected units must be removed upon discovery.

We have changed this AD based on this comment to make this more clear.

Request to Change the Compliance Time in Paragraph (j) of This AD

David White, of NetJets Aviation, requested we change the replacement compliance time in paragraph (j) of this AD to match the compliance time in paragraph (i) of this AD, which would allow six months to replace the affected PBE after it is identified by inspection or maintenance records review.

The commenter stated that if the request to allow a records review for paragraph (i) of this AD is accepted, then the maintenance records review could be accomplished without access to the airplane and could result in unnecessarily grounding the airplane if a discrepant mask is found during the records review. However, if the compliance time
for replacing the affected PBE matches the compliance time for the inspection/maintenance records review, the operators will have flexibility for compliance with paragraph (j).

We do not agree with the commenter. Once an airplane has been identified to have an affected PBE installed, it must be removed and replaced before further flight. Once a discrepant PBE has been identified during an inspection or review of records, the unit must be removed before further flight. However, continued operation with fewer than required PBE is permissible if allowed by your MEL.

We have not changed this AD based on this comment.

Request to Include Revised Service Bulletin

B/E Aerospace, Inc. requested that Service Bulletin (SB) 119003-35-013, Rev. 002, dated July 19, 2017, be incorporated into this AD.

The commenter stated that the only change in the B/E Aerospace SB 119003-35-013, Rev. 002, dated July 19, 2017, is the addition of warranty credit. All other information and instructions are the same as those contained in B/E Aerospace SB 119003-35-013, Rev. 001, dated February 24, 2017.

We agree with the commenter and have changed this AD based on this comment.

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 change described previously. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.
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 B/E Aerospace SB No. 119003-35-011, Rev. 000, dated February 4, 2015; SB 119003-35-009, Rev. 001, dated April 12, 2016; and SB No. 119003-35-013, Rev. 002, dated July 19, 2017. B/E Aerospace SB No. 119003-35-011, Rev. 000, dated February 4, 2015, describes procedures for inspecting PBE, P/N 119003-11, to determine if the vacuum seal of the pouch containing the PBE is compromised; B/E Aerospace SB No. 119003-35-009, Rev. 001, dated April 12, 2016, describes procedures for replacing PBE, P/N 119003-11 with P/N 119003-21; and B/E Aerospace SB No. 119003-35-013, Rev. 002, dated July 19, 2017, describes procedures for inspecting PBE P/N 119003-21 to determine the serial number and replacing any within the specified serial number range. 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.

**Differences Between this AD and the Service Information**

We are not requiring the disposal of the PBE as specified in the related service information because we have determined that owner/operators use various methods for disposal, which includes returning the PBE to the manufacturer. Therefore, we have not required the use of only one method of disposal. However, given the potential concern with activation of certain PBE units during disposal, we encourage coordination with the manufacturer and awareness of the disposal methods.
Costs of Compliance

We estimate that this AD affects 9,000 products installed on airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**Estimated costs**

<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>Inspecting the pouch containing the PBE for proper vacuum seal</td>
<td>.5 work-hour X $85 per hour = $42.50</td>
<td>Not applicable</td>
<td>$42.50</td>
<td>$382,500</td>
</tr>
<tr>
<td>Replace PBE P/N 119003-11 with PBE P/N 119003-21</td>
<td>.5 work-hour X $85 per hour = $42.50</td>
<td>$1,510</td>
<td>$1,552.50</td>
<td>$13,972,500</td>
</tr>
<tr>
<td>Inspecting the PBE to determine whether an affected PBE P/N 119003-21 is installed</td>
<td>.5 work-hour X $85 per hour = $42.50</td>
<td>Not applicable</td>
<td>$42.50</td>
<td>$382,500</td>
</tr>
<tr>
<td>Maintenance records review to determine whether an affected PBE P/N 119003-21 is installed</td>
<td>.5 work-hour X $85 per hour = $42.50</td>
<td>Not applicable</td>
<td>$42.50</td>
<td>$382,500</td>
</tr>
</tbody>
</table>

We estimate the following costs to replace any affected PBE P/N 119003-21 units that fall within the affected serial number range. We have no way of determining the number of aircraft that might need these repairs/replacements:

**On-condition costs**

<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 of PBE P/N 119003-21</td>
<td>.5 work-hour X $85 per hour = $42.50</td>
<td>$1,510</td>
<td>$1,552.50</td>
</tr>
</tbody>
</table>

The cost difference between AD 2016-11-20 and this AD is the cost of inspecting for serial number determination and replacing the affected serial numbers. This part of the AD could potentially affect 2,070 PBE units.
According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

**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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes and domestic business jet transport airplanes to the Director of the Policy and Innovation Division.
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) 2016-11-20, Amendment 39-18547 (81 FR 37492, June 10, 2016), and adding the following new AD:

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2016-11-20, Amendment 39-18547 (81 FR 37492, June 10, 2016), (“AD 2016-11-20”).

(c) Applicability

This AD applies to B/E Aerospace Protective Breathing Equipment (PBE), part numbers (P/N) 119003-11 and 119003-21, that are installed on airplanes.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 35; Oxygen.

(e) Unsafe Condition

AD 2016-11-20 was prompted by a report of a PBE unit, P/N 119003-11, catching fire upon activation by a crewmember. This AD was prompted by a report that PBE units, P/N 119003-21, within a certain serial number range are made with candle tube material determined to have a low yield strength and may be volatile upon use or disposal. We are issuing this AD to correct the unsafe condition on these products.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.
(g) Inspection Retained from AD 2016-11-20 for Airplanes with PBE, P/N 119003-11, Installed

Within 3 months after July 15, 2016 (the effective date of AD 2016-11-20), while still in the stowage box, physically inspect the PBE pouch to determine if it has an intact vacuum seal. Do this inspection following paragraph III.A.(1) of the Accomplishment Instructions in B/E Aerospace Service Bulletin (SB) No. 119003-35-011, Rev. 000, dated February 4, 2015.

(h) Replacement Retained from AD 2016-11-20 for Airplanes with PBE, P/N 119003-11, Installed

(1) During the inspection required in paragraph (g) of this AD, if a PBE pouch is found that does not have an intact vacuum seal, before further flight, replace the PBE with a PBE unit, P/N 119003-21 that is not within the serial number (S/N) range 004-14768M through 004-21093M or 004-02393M through 004-03033M, following paragraphs III.C., III.D.(4), III.D.(6), and III.D.(7) of the Accomplishment Instructions in B/E Aerospace SB No. 119003-35-009, Rev. 001, dated April 12, 2016, or replace it with another FAA-approved PBE installation.

(2) During the inspection required in paragraph (g) of this AD, if a PBE pouch is found where the vacuum seal is intact, within 18 months after July 15, 2016 (the effective date of AD 2016-11-20), remove PBE, P/N 119003-11, and replace it with a PBE, P/N 119003-21 that is not within the S/N range 004-14768M through 004-21093M or 004-02393M through 004-03033M, following paragraphs III.C., III.D.(4), III.D.(6), and III.D.(7) of the Accomplishment Instructions in B/E Aerospace SB No. 119003-35-009, Rev. 001, dated April 12, 2016, or replace it with another FAA-approved PBE installation.
(3) Once a discrepant PBE has been identified during an inspection or review of records, the unit must be removed before further flight. However, continued operation with fewer than required PBE is permissible if allowed by your MEL.

(i) New Inspection for Airplanes with PBE, P/N 119003-21, Installed

Within 6 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), inspect to determine if the S/N of the installed PBE, P/N 119003-21, is within the range of 004-14768M through 004-21093M or 004-02393M through 004-03033M. Do the inspection following paragraph III.A of the Accomplishment Instructions in B/E Aerospace SB No. 119003-35-013, Rev. 002, dated July 19, 2017.

(1) Instead of the inspection, you may do a maintenance records review, to determine the S/N of the installed PBE, P/N 119003-21.

(2) If you choose to do the maintenance records review and you can positively determine that the S/N of the installed PBE, P/N 119003-21, is within the range of 004-14768M through 004-21093M or 004-02393M through 004-03033M, continue to the replacement requirement in paragraph (j) of this AD.

(3) If you choose to do the maintenance records review and you cannot positively determine that the S/N of the installed PBE, P/N 119003-21, is within the range of 004-14768M through 004-21093M or 004-02393M through 004-03033M, then you must either go back and do the inspection specified in paragraph (i) of this AD to determine if the replacement in paragraph (j) of this AD is necessary or do the replacement in paragraph (j) of this AD.
(j) **New Replacement for Airplanes with PBE, P/N 119003-21, Installed**

During the inspection or the maintenance records review required in paragraph (i) of this AD, if it is found that the PBE, P/N 119003-21, is within the S/N range specified in paragraph (i) of this AD, before further flight, remove the PBE and replace it with a PBE, P/N 119003-21, that does not have a S/N 004-14768M through 004-21093M or 004-02393M through 004-03033M. Do this replacement following paragraphs III.C., III.D.(4), III.D.(6), and III.D.(7) of the Accomplishment Instructions in B/E Aerospace SB No. 119003-35-013, Rev. 002, dated July 19, 2017, or replace it with another FAA-approved PBE installation. Once a discrepant PBE has been identified during an inspection or review of records, the unit must be removed before further flight. However, continued operation with fewer than required PBE is permissible if allowed by your MEL.

(k) **Prohibited Installation**

As of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install a PBE, P/N 119003-21, that has a S/N within the range of 004-14768M through 004-21093M or 004-02393M through 004-03033M.

(l) **Credit for Actions Done Following Previous Service Information**

If you performed the inspection and replacement action required in paragraphs (i) and (j) of this AD before [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) using B/E Aerospace SB No. 119003-35-013, Rev. 000, dated January 9, 2017, or B/E Aerospace SB No. 119003-35-013, Rev. 001, dated February 24, 2017, you have met the requirements of those paragraphs of this AD.
(m) **Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita ACO 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 manager of the ACO, send it to the attention of the person identified in paragraph (n)(1) 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.

(n) **Related Information**

For more information about this AD, contact David Enns, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 S. Airport Road, Room 100, Wichita, Kansas 67209; phone: (316) 946-4147; fax: (316) 946-4107; email: david.enns@faa.gov.

(o) **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 this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].


(ii) Reserved
(4) The following service information was approved for IBR on July 15, 2016 (81 FR 37492, June 10, 2016).

(i) B/E Aerospace Service Bulletin No. 119003-35-009, Rev. 001, dated April 12, 2016.


(5) For service information identified in this AD, contact B/E Aerospace, Inc.

(6) You may view this service information at FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0439.

(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 Kansas City, Missouri, on August 30, 2017.

Melvin Johnson,
Deputy Director, Policy and Innovation Division,
Aircraft Certification Service.

[FR Doc. 2017-18855 Filed: 9/8/2017 8:45 am; Publication Date: 9/11/2017]