



[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-0209; Product Identifier 2020-NM-004-AD; Amendment 39-21275; AD 2020-21-02]

RIN 2120-AA64

**Airworthiness Directives;** Kidde Aerospace & Defense

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Kidde Aerospace & Defense cargo fire extinguisher halon bottles installed on various transport category airplanes. This AD was prompted by a report indicating that certain cargo fire extinguisher halon bottles installed in the cargo compartment had low charge pressure. This AD requires an inspection to determine the part number and serial number of the cargo fire extinguisher halon bottles and replacement of affected parts with serviceable parts. The FAA is 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 certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For Boeing service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>. For Kidde Aerospace & Defense service information identified in this final rule contact Kidde Aerospace & Defense, 4200 Airport Drive NW, Building B, Wilson, NC 27896-8630; telephone 319-295-5000; <http://kiddetechnologies.com/aviation/>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0209.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0209; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is 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:** Samuel Belete, Aerospace Engineer, Systems and Equipment Section, FAA, Atlanta ACO Branch, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5580; fax: 404-474-5606; email: [Samuel.Belete@faa.gov](mailto:Samuel.Belete@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Kidde Aerospace & Defense cargo fire extinguisher halon bottles installed on various transport category airplanes. The NPRM published in the *Federal Register* on March 30, 2020 (85 FR 17507). The NPRM was prompted by a report indicating that certain cargo fire extinguisher halon bottles installed in the cargo compartment had low charge pressure. The NPRM proposed to require an inspection to determine the part number and serial number of the cargo fire extinguisher halon bottles and replacement of affected parts with serviceable parts.

### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Support for the NPRM**

Boeing concurred with the content of the NPRM. United Airlines agreed with the intent of the NPRM.

### **Request to Reduce the Compliance Time**

The Air Line Pilots Association, International (ALPA) requested that the compliance time specified in the proposed AD be reduced from 24 months to 12 months. The commenter stated that a compliance time of 12 months was specified in the Kidde Aerospace service information.

The FAA disagrees with the commenter's request. The preamble of the NPRM included an explanation regarding the compliance time. As stated in the NPRM, the

Kidde Aerospace & Defense service information specifies a compliance time of 12 months to do the inspection and accomplish the replacement, and the Boeing service information specifies a compliance time of 24 months to accomplish the replacement. In developing an appropriate compliance time for this action, the FAA considered the urgency associated with the subject unsafe condition, the availability of required parts, and the practical aspects of accomplishing the required replacement within a period of time that corresponds to the normal scheduled maintenance for most affected operators. In light of these items, the FAA determined that a 24-month compliance time is appropriate and adequate to address the unsafe condition. The FAA has not revised this AD in regard to this issue.

#### **Request to Provide Detailed Information for Bottle Test and Refill**

Southwest Airlines requested that paragraphs (g), (h), and (i) of the proposed AD be revised to provide, or refer to, detailed instructions on how to test and refill cargo fire extinguisher halon bottles prior to marking them with a “G” stamp and returning them to service. The commenter stated that it understood the intent of the NPRM was to have the unsafe condition removed from operational airplanes by having affected cargo fire extinguisher halon bottles removed and not reinstalled until the halon bottles had been tested, refilled, and marked with a “G” stamp. The commenter suggested that these actions could be accomplished via standard airplane maintenance manual (AMM) processes instead of using the procedures in the Boeing service information that was specified in the proposed AD.

The FAA does not agree with the commenter’s request. The information provided in paragraphs (g), (h), and (i) of this AD is specific and complete enough to address the unsafe condition. The affected cargo fire extinguisher halon bottles are installed on

various transport category airplanes, and as such, referring to specific AMMs is not practical. Furthermore, the FAA notes that only halon bottles having certain serial numbers are affected and need to be replaced. There are a significant number of cargo fire extinguisher halon bottles with serial numbers that are not affected by the requirements of this AD and that do not need to be removed and tested. Operators have the option of installing a halon bottle with a serial number that is not affected by the requirements of this AD, or installing a halon bottle that has been refurbished by an authorized party. If operators establish a different procedure to refurbish affected cargo fire extinguisher halon bottles, they can apply for an alternative method of compliance by using the procedures described in paragraph (1) of this AD. The FAA has not revised this AD in regard to this issue.

#### **Explanation of Change to Manufacturer's Name Specified in this Final Rule**

The FAA has revised paragraph (c)(2)(iv) of this AD to identify the manufacturer name as MHI RJ Aviation UL (instead of Bombardier, Inc.), as published in the most recent type certificate data sheet for the affected models.

#### **Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

### **Related IBR Material under 1 CFR Part 51**

The FAA reviewed the following Boeing Alert Requirements Bulletins. This service information describes procedures for an inspection to determine the serial number of the cargo fire extinguisher halon bottle having a certain part number and replacing affected parts with serviceable parts. These documents are distinct since they apply to different airplane models.

- Alert Requirements Bulletin 737-26A1150 RB, dated September 27, 2019.
- Alert Requirements Bulletin 737-26A1151 RB, dated September 27, 2019.

The FAA reviewed the following Kidde Aerospace & Defense service information. This service information describes, among other actions, procedures for replacing affected fire extinguishers (referred to as “cargo fire extinguisher halon bottles” in this AD) with serviceable parts. These documents are distinct since they apply to different airplane models.

- Service Bulletin 473919-26-521, Rev 02, dated November 7, 2019.
- Service Bulletin 473957-26-518, Rev 02, dated November 4, 2019.

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.

## Costs of Compliance

The FAA estimates that this AD affects 3,308 appliances installed on, but not limited to, the transport category airplanes identified in paragraphs (c)(2)(i) through (vii) of this AD. The FAA estimates the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	2 work-hours X \$85 per hour = \$170	\$0	\$170	\$562,360

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the inspection. The FAA has no way of determining the number of aircraft that might need replacements:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement	4 work-hours X \$85 per hour = \$340	\$25,305	\$25,645

According to manufacturer for the cargo fire extinguisher halon bottles, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the 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.

The FAA is 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) Will not affect intrastate aviation in Alaska, and
- (3) 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):

**2020-21-02 Transport Category Airplanes:** Amendment 39-21275; Docket No. FAA-2020-0209; Product Identifier 2020-NM-004-AD.

**(a) Effective Date**

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

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to the Kidde Aerospace & Defense cargo fire extinguisher halon bottles having part numbers and serial numbers identified in Table 1 of the service information identified in paragraphs (c)(1)(i) and (ii) of this AD.

(i) Kidde Aerospace & Defense Service Bulletin 473957-26-518, Rev 02, dated November 4, 2019.

(ii) Kidde Aerospace & Defense Service Bulletin 473919-26-521, Rev 02, dated November 7, 2019.

(2) These affected cargo fire extinguisher halon bottles are installed on various transport category airplanes including, but not limited to, the airplanes identified in paragraphs (c)(2)(i) through (vii) of this AD, certificated in any category.

(i) Airbus Canada Limited Partnership (type certificate previously held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Model BD-500-1A10 and BD-500-1A11 airplanes.

(ii) Airbus SAS Model A330-200 and A330-300 series airplanes.

(iii) The Boeing Company Model DC-9-81 (MD-81) airplanes, and Model 737 series airplanes.

(iv) MHI RJ Aviation ULC (type certificate previously held by Bombardier, Inc.) Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, and Model CL-600-2C11 (Regional Jet Series 550) airplanes.

(v) De Havilland Aircraft of Canada Limited (type certificate previously held by Bombardier, Inc.) Model DHC-8-400 series airplanes.

(vi) Embraer S.A. Model ERJ 170-100 STD airplanes, and Model ERJ 190-100 STD, -300, and -400 airplanes.

(vii) Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aeronautics) Model SAAB 2000 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 26, Fire protection.

**(e) Unsafe Condition**

This AD was prompted by a report indicating that certain cargo fire extinguisher halon bottles had low charge pressure. Low charge pressure of a cargo fire extinguisher halon bottle installed in the cargo compartment, if not addressed, could result in insufficient halon concentrations to extinguish a fire in the cargo compartment.

**(f) Compliance**

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

**(g) Definitions**

For this AD, the definitions specified in paragraphs (g)(1) through (3) of this AD apply.

(1) Group 1: Boeing Model 737-8 and 737-9 airplanes, and Model 737-700, 737-800, and 737-900ER series airplanes.

(2) Group 2: Transport category airplanes other than those identified as group 1.

(3) Affected part: A cargo fire extinguisher halon bottle, manufactured by Kidde Aerospace & Defense, having a part number and serial number that is identified in the service information identified in paragraphs (c)(1)(i) and (ii) of this AD.

Note 1 to paragraph (g)(3): The terms “cargo fire extinguisher halon bottles” and “fire extinguishers” are used interchangeably in this AD and the service information identified in paragraphs (c)(1)(i) and (ii) of this AD, and in paragraphs (i)(1)(i) and (ii) of this AD.

**(h) Inspection**

Within 24 months after the effective date of this AD, do an inspection to determine the part number and serial number of the cargo fire extinguisher halon bottles installed in the cargo compartment. A review of maintenance records can be done in lieu

of the inspection provided the part number and serial number of the cargo fire extinguisher halon bottles can be conclusively determined from that review.

**(i) Replacement**

If, during the inspection or records review required by paragraph (h) of this AD, it is determined that an affected part, as identified in paragraph (g)(3) of this AD, is installed, before further flight, replace the part with a serviceable part in accordance with the applicable service information identified in paragraph (i)(1) and (2) of this AD.

(1) For group 1 airplanes as identified in paragraph (g)(1) of this AD: The Accomplishment Instructions of the service information identified in paragraph (c)(1)(i) of this AD, or the service information identified in paragraph (i)(1)(i) or (ii) of this AD, as applicable.

(i) Boeing Alert Requirements Bulletin 737-26A1150 RB, dated September 27, 2019.

(ii) Boeing Alert Requirements Bulletin 737-26A1151 RB, dated September 27, 2019.

(2) For group 2 airplanes as identified in paragraph (g)(2) of this AD: The Accomplishment Instructions of the service information identified in paragraph (c)(1)(i) or (ii) of this AD, as applicable.

**(j) Parts Installation Limitation**

As of the effective date of this AD, no person may install on any airplane an affected part as identified in paragraph (g)(3) of this AD unless that part has a circled letter "G" stamped at a distance of approximately one inch from the left edge of the

placard, indicating that the cargo fire extinguisher halon bottle has been tested and refilled.

**(k) Special Flight Permit**

If low pressure is detected or a warning is displayed in the flight deck, special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the airplane to a location where the cargo fire extinguisher halon bottles can be replaced or modified.

**(l) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta 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 certification office, send it to the attention of the person identified in paragraph (m) 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) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (l)(3)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An

AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled 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 RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(m) Related Information**

For more information about this AD, contact Samuel Belete, Aerospace Engineer, Systems and Equipment Section, FAA, Atlanta ACO Branch, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5580; fax: 404-474-5606; email: Samuel.Belete@faa.gov.

**(n) 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.

(i) Boeing Alert Requirements Bulletin 737-26A1150 RB, dated September 27, 2019.

(ii) Boeing Alert Requirements Bulletin 737-26A1151 RB, dated September 27, 2019.

(iii) Kidde Aerospace & Defense Service Bulletin 473919-26-521, Rev 02, dated November 7, 2019.

(iv) Kidde Aerospace & Defense Service Bulletin 473957-26-518, Rev 02, dated November 4, 2019.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>.

(4) For Kidde Aerospace & Defense service information identified in this AD, contact Kidde Aerospace & Defense, 4200 Airport Drive NW, Building B, Wilson, NC 27896-8630; telephone 319-295-5000; <http://kiddetechnologies.com/aviation/>.

(5) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(6) 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, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.  
Issued on October 1, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.  
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