

**2010-01-03 Fire Fighting Enterprises Limited:** Amendment 39-16159. Docket No. FAA-2009-1225; Directorate Identifier 2009-NM-257-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective January 20, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to portable Halon 1211 (BCF) fire extinguishers manufactured by Fire Fighting Enterprises Limited. These fire extinguishers may be installed on (or carried or stowed on board) various transport airplanes, small airplanes, and rotorcraft, certificated in any category, identified in but not limited to the airplanes and rotorcraft of the manufacturers included in Table 1 of this AD, all type-certificated models.

**Table 1--Affected Airplanes and Rotorcraft**

<b>Manufacturer</b>	<b>Product Subtype</b>
328 Support Services GmbH (Type Certificate previously held by AvCraft Aerospace GmbH; Fairchild Dornier GmbH; Dornier Luftfahrt GmbH)	Transport Airplane
Aermacchi S.p.A.	Small Airplane
Agusta S.p.A.	Rotorcraft
AgustaWestland	Rotorcraft
Airbus (Type Certificate previously held by Airbus Industrie)	Transport Airplane
Aircraft Industries a.s. (Type Certificate previously held by LETECKÉ ZÁVODY a.s.; LET Aeronautical Works)	Small Airplane
Alenia Aeronautica	Transport Airplane
B-N Group Ltd (Type Certificate previously held by Pilatus Britten-Norman Limited; Britten-Norman (Bembridge) Limited)	Small Airplane
BAE Systems (Operations) Limited (Type Certificate previously held by British Aerospace Regional Aircraft; British Aerospace (Commercial Aircraft) Limited; Jetstream Aircraft Limited; British Aerospace, PLC; Avro International Aerospace Division; British Aerospace)	Transport Airplane
The Boeing Company	Transport Airplane
Empresa Brasileira de Aeronautica S.A. (EMBRAER)	Transport Airplane
Eurocopter Deutschland GMBH (ECD) (Type Certificate previously held by Messerschmitt-Bolkow-Blohm-GmbH)	Rotorcraft

Eurocopter France	Rotorcraft
Fokker Services B.V.	Transport Airplane
Hawker Beechcraft (Type Certificate previously held by Raytheon Aircraft Company; Beech Aircraft Corporation)	Small Airplane
Pilatus Aircraft Ltd.	Small Airplane
Saab AB, Saab Aerosystems (Type Certificate previously held by SAAB AIRCRAFT AB; SAAB-Fairchild)	Transport Airplane
Short Brothers PLC (Type Certificate previously held by Short Brothers, Ltd.)	Transport Airplane
Triton America LLC (Type Certificate previously held by AAI Acquisition, Inc; Adam Aircraft)	Small Airplane
Vulcanair S.p.A. (Type Certificate previously held by Partenavia Costruzioni Aeronautiche S.p.A)	Small Airplane

## Subject

(d) Air Transport Association (ATA) of America Code 26: Fire Protection.

## Reason

(e) The mandatory continuing airworthiness information (MCAI) consists of two European Aviation Safety Agency (EASA) ADs: 2009- 0251-E, dated November 25, 2009, and 2009-0262, dated December 15, 2009. EASA AD 2009-0251-E states:

The Civil Aviation Authority of the United Kingdom (UK) has informed EASA that significant quantities of Halon 1211 gas, determined to be outside the required specification, have been supplied to the aviation industry for use in fire extinguishing equipment. Halon 1211 (BCF) is used in handheld fire extinguishers, usually fitted or stowed in aircraft cabins.

EASA published Safety Information Bulletin (SIB) 2009-39 on 23 October 2009 to make the aviation community aware of this safety concern.

The results of the ongoing investigation now show that LyonTech Engineering Ltd, a UK-based company, has supplied a quantity of heavily contaminated Halon 1211 (BCF) to Fire Fighting Enterprises (FFE). This Halon 1211 has subsequently been used to fill certain FFE portable fire extinguishers that are now likely to be installed in or carried on board aircraft.

The contaminated nature of this gas, when used against a fire, may lead to release of toxic fumes, possibly causing injury to aircraft occupants.

For the reason described above, this EASA AD requires the identification and removal from service of all affected fire extinguishers and replacement with serviceable units.

EASA AD 2009-0262 adds the following:

\* \* \* \* \*

\* \* \* On 25 November 2009, EASA Emergency AD 2009-0251E was published to address an earlier batch of extinguishers with contaminated Halon 1211.

The results of the ongoing investigation have now established that LyonTech Engineering Ltd, a UK-based company, has supplied further consignments of Halon 1211 (BCF) to Fire Fighting Enterprises (FFE) that do not meet the required specification. This Halon 1211 has subsequently been used to fill certain FFE portable cabin and toilet compartment fire extinguishers that are now likely to be installed in or carried on board aircraft.

The contaminated nature of this gas, when used against a fire, may provide reduced fire suppression, endangering the safety of the aircraft and its occupants. In addition, extinguisher activation may lead to release of toxic fumes, possibly causing injury to aircraft occupants.

\* \* \* \* \*

## **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

## **Actions**

(g) Do the following actions.

(1) Within 90 days after the effective date of this AD, replace portable Halon 1211 (BCF) fire extinguishers manufactured by Fire Fighting Enterprises Limited with serviceable fire extinguishers; except as provided by paragraph (g)(2) of this AD.

(2) Fire extinguishers identified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD are not required to be replaced.

(i) Fire extinguishers conclusively determined to have been most recently filled with Halon 1211 supplied by a company other than LyonTech Engineering Limited.

(ii) Fire extinguishers that have been most recently filled by LyonTech Engineering Limited and that are conclusively determined by Fire Fighting Enterprises Limited to be filled with Halon 1211 that meets their design specification for Halon purity.

(3) As of the effective date of this AD, do not install any portable fire extinguisher manufactured by Fire Fighting Enterprises Limited unless it has been conclusively determined that the last time it was filled, it was filled with Halon 1211 supplied by a company other than LyonTech Engineering Limited; or it has been conclusively determined by Fire Fighting Enterprises Limited that the last time it was filled, it was filled with Halon 1211 that meets their design specification for Halon purity.

## **FAA AD Differences**

**Note:** This AD differs from the MCAI and/or service information as follows:

- (1) EASA ADs 2009-0251-E and 2009-0262 specify to inspect for certain fire extinguishers manufactured by Fire Fighting Enterprises Limited and replace if necessary. This AD requires replacing all fire extinguishers manufactured by Fire Fighting Enterprises Limited except as provided in paragraph (g)(2) of this AD.
- (2) EASA AD 2009-0251-E specifies a time of 2 days to do the actions and EASA AD 2009-0262 specifies a time of 30 days to do the actions. This AD requires that the actions be done within 90 days. We have determined that a 90-day compliance time will ensure an acceptable level of safety.

## **Other FAA AD Provisions**

(h) The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The manager of the office having certificate responsibility for the affected product has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, will coordinate requests for approval of AMOCs with the manager of the appropriate office for the affected product. Send information to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.
- (3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

## **Related Information**

(i) Refer to MCAI EASA Emergency Airworthiness Directive 2009- 0251-E, dated November 25, 2009; and EASA Airworthiness Directive 2009-0262, dated December 15, 2009; for related information.

## **Material Incorporated by Reference**

(j) None.