European Union Aviation Safety Agency

Safety Information Bulletin

Airworthiness

SIB No.: 2021-14

Issued: 01 July 2021

Subject: **Hand-operated Fire Extinguishers – Removal from Service**

Ref. Publications:
umlaut Engineering GmbH (formerly P3 Engineering GmbH) Vendor Service Bulletin (VSB) P3VSB000003 original issue dated 10 May 2021.

Applicability:
umlaut Engineering GmbH (formerly P3 Engineering GmbH) Part Number (P/N) P3APP003010A, P3APP003010B and P3APP003010C HAFEX (Halon-free) fire extinguishers.

These fire extinguishers are known to be installed on, **but not limited to**, Airbus A318, A319, A320, A321, A330, A340, A350 and A380 aeroplanes; ATR 72 aeroplanes; Airbus Helicopters Deutschland MBB-BK117, EC635 and EC135 helicopters; Airbus Helicopters AS 332, AS 365, EC 175, EC 225, SA 330 and SA 365 and EC 155 helicopters; Leonardo AB139, AB 204, AB 205, AB212, AB412, AS-61, AW139, AW169 and AW189 helicopters; and WSK PZL-Świdnik PZL W-3A helicopters.

Description:
Occurrences have been reported of an issue on certain HAFEX fire extinguishers, manufactured by umlaut Engineering GmbH (formerly P3 Engineering GmbH), where, under certain environmental conditions, it might not be possible to discharge the extinguisher, resulting in a loss of extinguishing functionality of the equipment.

Investigations determined that, after prolonged exposure (12 hours or more) to high temperature conditions of more than 65 °C, the spindle in the fire extinguisher head can dislodge, making the fire extinguisher inoperable. However, there is no indication of this inoperable state, as the pressure gauge correctly indicates the pressure, and the weight of the extinguisher does not change.

Considering that all portable fire extinguishers installed on an aircraft may be affected at the same time, this condition, if not detected and corrected, could prevent proper extinguishing of a fire in the cabin or cockpit, possibly resulting in damage to the aircraft and injury to occupants.

To address this safety issue, umlaut Engineering GmbH (formerly P3 Engineering GmbH) issued VSB P3VSB000003 providing instructions to identify and inspect the affected hand-held fire extinguishers and to remove inoperable items from service.

This SIB is indented to raise awareness and to recommend precautionary measures to mitigate the above described safety concern.

In addition to this SIB, EASA is issuing an Airworthiness Directive under Regulation (EU) 748/2012, Part 21.A.3B, on the aircraft types where it is known these extinguishers are installed.

Recommendation(s):

EASA recommends all aircraft owners, operators, maintenance organisations and aircraft manufacturers identify whether any affected fire extinguisher is installed on their aircraft, or held in any spares inventory, to inspect the affected fire extinguishers and remove the inoperable items from service.

EASA recommends that affected aircraft owners, operators, and maintenance organisations contact the design approval holder of designs that installed the affected fire extinguishers, to determine the instructions to be followed when operating, parking or storing the aircraft and extinguisher in locations subject to high temperatures.

Furthermore, EASA recommends design approval holders of designs that installed the affected fire extinguishers to report such occurrences to EASA, to carry out a risk assessment, and to put in place any necessary action(s) to ensure the continued operability of the extinguishers.

At this time, no corrective action instructions are available that would allow return to service of the fire extinguishers that are considered inoperable.

Contact(s):

For further information contact the EASA Safety Information Section, Certification Directorate, E-mail: ADs@easa.europa.eu.

For any question concerning the technical content of this SIB, please contact:
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