



EASA Safety Information Notice

No.: 2007-29

Issued: 25 September 2007

Subject: Lavatory Ionization Fire/Smoke Detectors resulting in false warnings

Ref. Publication: FAA Special Airworthiness Information Bulletin (SAIB) NM-07-52, dated September 24, 2007.

Introduction: This Safety Information Notice (SIN) refers to FAA SAIB NM-07-52 (attached to this document as page 2) and informs manufacturers of smoke detectors, manufacturers of commercial airplanes, and owners or operators of transport category airplanes that lavatory ionization fire/smoke detectors installed in airplanes may provide a false warning ("false warn") if the cabin is over-pressurized.

Applicability: Any aircraft, as indicated.

Recommendation: This Safety Information Notice is for information only.

Contact: For further information contact the Airworthiness Directives, Safety and Research Section, Certification Directorate, EASA.
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FAA
Aircraft Certification Service

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: NM-07-52

Date: September 24, 2007

SUBJ: Lavatory ionization fire/smoke detectors

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) informs you—a manufacturer of smoke detectors, a manufacturer of commercial airplanes, or a registered owner or operator of a transport category airplane—that lavatory ionization fire/smoke detectors installed in airplanes may provide a false warning (“false warn”) if the cabin is over-pressurized.

Background

The FAA received a report of a “false warn” of an ionization smoke detector installed in a lavatory. The “false warn” occurred during an approach to an airport and after landing. The airworthiness provisions do not require that lavatory smoke detectors meet the provisions in Technical Standard Order (TSO) TSO-C1d, which applies to cargo compartment smoke detectors. The TSO requires that tests be conducted to ensure that no “false warn” occurs when subjected to sudden cabin pressure decrease or increase.

During this event, the cabin air pressure was over-pressurized and, for a portion of the event, the cabin pressure was greater than sea-level pressure. Both during approach and after landing, the detector did “false warn.” Even though flight attendants confirmed that there was no smoke in the lavatory, this false warning added confusion, which resulted in the crew initiating an emergency evacuation while the cabin was over-pressurized. The root cause of the “false warn” was the over-pressurization event, which was due to debris lodged in the cabin air pressure regulator valves. This prevented normal control of the cabin pressure. Appropriate maintenance actions should prevent cabin over-pressure problems. This SAIB provides awareness to the crew of lavatory smoke detector sensitivity.

Recommendations

The FAA would like crew members to be aware that in the event the cabin is over-pressurized, airplane lavatory ionization smoke detectors could “false warn.” In such cases, good crew management and communications between flight deck crew and cabin attendants is needed to ensure that correct action is taken. Airlines should incorporate this note in their Flight Crew Operations Manuals (FCOM) and Flight Attendant Manuals (FAM) / Cabin Crew Manuals (CCM).

For Further Information Contact

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