



SAIB: CE-10-04

Date: October 19, 2009

SUBJ: Smoke Detection: Cockpit Smoke and Fumes

This is information only. Recommendations aren't mandatory.

Contact Information Correction

The current Special Airworthiness Information Bulletin (SAIB) CE-10-04, dated October 8, 2009, has an incorrect telephone number in the For Further Information Contact section. The correct contact telephone number is 816-329-4141.

Introduction

This SAIB is being issued to alert owners, operators, and original equipment manufacturers (OEM) to an airworthiness concern regarding emergency checklist procedures that apply to ventilating smoke and fumes from the airplane cockpit in general aviation (GA) aircraft. Prior to 14 CFR § 23.831, Amendment 23-34, it was not required to include into the checklists procedures for removing smoke and fumes from the airplane cockpit.

The airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

After an in-flight electrical fire in a Canadian-registered Cessna Model 152 airplane, the Transportation Safety Board of Canada recommended that the "FAA take action to review checklist procedures dealing with smoke and fire in GA aircraft," and include additional steps to eliminate smoke or fumes. For aircraft that were type certificated to CAR 3 and aircraft type certificated prior to 14 CFR Amendment 23-34, the emergency checklist procedures in the original equipment manufacture (OEM) pilot operating handbook (POH) did not address ventilating smoke and fumes from the airplane cockpit.

The current 14 CFR part 23 (23-58 amendment) requires OEMs to include instructions in their POH or airplane flight manual (AFM) to remove smoke from the cockpit and passenger cabin of both pressurized and un-pressurized aircraft.

14 CFR FAR 23.831 (a) "Each passenger and crew compartment must be suitably ventilated..."

14 CFR 23.831 (b) "If accumulation of hazardous quantities of smoke in the cockpit area is reasonably probable, smoke evacuation must be readily accomplished starting with full pressurization and without depressurizing beyond safe limits."

14 CFR 23.1585 (a) "For all airplanes, information concerning normal, abnormal (if applicable), and emergency procedures and other pertinent information necessary for safe operation and the achievement of the scheduled performance must be furnished..."

Owners and operators may have modified their aircraft to meet operational requirements or added/removed supplemental type certificates (STC). These alterations could require changes to the original POH or AFM and associated emergency checklist or abnormal procedures checklist.

Recommendations

There are no regulatory requirements in CAR 3 or prior to Amendment 23-24 and 23-42 of 14 CFR part 23 requiring instructions in the POH or AFM to remove smoke or fumes from the cockpit and passenger cabin. For airplanes where the OEM no longer exist, owners and operators may want to contact the Experimental Aircraft Association or airplane type clubs for information as to the removal of smoke and fumes in their make and model airplane. These emergency checklists may include the following statement: “to remove smoke or fumes from the cockpit do the following ...” if such a similar statement does not already exist in their POH or AFM.

The FAA recommends the following:

- Owners and operators check their added/removed STC instructions for continued airworthiness for the removal of smoke and fumes against the OEM issued emergency checklist.
- If the OEM emergency checklist has no instructions for the removal of smoke or fumes in the cockpit, then owners and operators contact the OEM of the make and model airplane for emergency checklist instruction or additions.
- OEMs add to the emergency checklist steps for ventilating smoke and fumes from the cockpit for their specific make and model. OEMs may have to issue service bulletins instructing owners and operators where and what to write into the emergency checklist or issue a new emergency checklist that contains instructions for the removal of smoke and fumes from the cockpit.

For Further Information Contact

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