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Change Description:

Subject: FAR 25.1203: In-Flight Monitoring of Fire Detection Systems

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Order in PDF Format:

Full Text of Order:

Subject: FAR 25.1203: In-Flight Monitoring of Fire Detection Systems

. PURPOSE. This order furnishes information and guidance regarding compliance with the fire detector requirements of FAR 25.

2. DISTRIBUTION. This order is distributed to all Washington Flight Standards offices to the branch level, and to all Regional Flight Standards offices to the section level.

3. BACKGROUND. Amendment 25-26 added new requirements for fire detector installations. These new rules covered, among other things, a requirement for crew warnings in the event of a short circuit or severing of the detector wiring or sensor. The new words require "a means to warn the crew in the event of a short circuit in the sensor or associated wiring" and "a means to warn the crew in the event that the sensor or associated wiring within a designated fire zone is severed at one point."

4. DISCUSSION. A manufacturer suggested that a push-to-test circuit for in-flight monitoring of the detector system might satisfy the new requirements. In such a case the crew would be required to,check the

detector system manually to determine the condition of the system. FAR 25.1203(b)(2) and (3) requires that there be a means to alert the crew when a fault or short circuit occurs in the fire detector system. This implies that an automatic continuous warning system is needed. The manual push-to-test periodic system proposed by the manufacturer does not fulfill this requirement.

5. SUMMARY. A push-to--test circuit will not satisfy the requirements of FAR 25.1203(b)(2) and (3). These rules require continuous in-flight monitoring of the integrity of the fire detector system, and FAR 25.1203(d) requires a means to allow the crew to check in flight the functioning of each fire or overheat detector system.

/s/

James O. Robinson

Acting Chief

Engineering and Manufacturing Division

Flight Standards Service