

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2011-0913; Directorate Identifier 2011-NM-031-AD; Amendment 39-17010; AD 2012-07-04]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Cessna Aircraft Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

---

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Cessna Aircraft Company Model 680 airplanes. This AD was prompted by a false cross-feed command to the right-hand fuel control card, due to the cross-feed inputs on the left- and right-hand fuel control cards being connected together and causing an imbalance of fuel between the left and right wing tanks. This AD requires adding diodes to the fuel cross-feed wiring, and revising the airplane flight manual to include procedures to use when the left or right generator is selected OFF. We are issuing this AD to prevent lateral imbalance of the airplane, resulting from uncontrolled fuel cross-feed, which can be corrected by deflecting the aileron trim; deflecting the aileron trim increases the pilot's workload and could exceed the airplane's limitation in a short period of time, resulting in reduced controllability of the airplane.

**DATES:** This AD is effective May 15, 2012.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of May 15, 2012.

**ADDRESSES:** For service information identified in this AD, contact Cessna Aircraft Co., P.O. Box 7706, Wichita, Kansas 67277; telephone 316-517-6215; fax 316-517-5802; email [citationpubs@cessna.texttron.com](mailto:citationpubs@cessna.texttron.com); Internet <https://www.cessnasupport.com/newlogin.html>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Nhien Hoang, Aerospace Engineer, Electrical Systems and Avionics Branch, ACE-119W, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; phone: (316) 946-4190; fax: (316) 946-4107; email: [nhien.hoang@faa.gov](mailto:nhien.hoang@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on August 31, 2011 (76 FR 54141), and proposed to require adding diodes to the fuel cross-feed wiring, and revising the airplane flight manual to include procedures to use when the left or right generator is selected OFF.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received from Cessna Aircraft Company (Cessna), the manufacturer, on the NPRM (76 FR 54141, August 31, 2011), and the FAA's response to each comment.

### **Requests To Correct References to Airplane Flight Manual (AFM) Revisions and Temporary Changes (TCs) in Paragraph (h) of This AD**

Cessna commented that the NPRM (76 FR 54141, August 31, 2011) has incorrect references to certain AFM TCs, does not refer to certain applicable AFM TCs, and incorrectly addresses the procedure change in the recently FAA-approved Revision 10, dated June 30, 2011, of the Cessna 680 Citation Sovereign AFM. We infer that Cessna requested that we correct references to the AFM revisions and TCs in paragraph (h) of the NPRM.

Cessna also commented that the text for AFM revision 68FM-10, dated June 30, 2011, of the Cessna 680 Citation Sovereign AFM, does not include the instruction to pull the fuel pump circuit breakers, which was part of the TC, and is not necessary once the modification specified in Cessna Service Bulletin 680-24-11, dated December 16, 2010, is done.

Cessna further commented that the wording of the NPRM (76 FR 54141, August 31, 2011) is incorrect in its reference to Cessna TC TC-R09-13, dated October 15, 2010, to the Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010, and that the TC is applicable until Revision 10, dated June 30, 2011, of the Cessna 680 Citation Sovereign AFM, is incorporated into the AFM. Further, the commenter stated that the remaining TCs for Revision 9, dated May 24, 2010, of the Cessna 680 Citation Sovereign AFM are to be removed when Revision 10 is incorporated, and there are 3 new TCs for Cessna 680 Citation Sovereign AFM, Revision 10, dated June 30, 2011, that are the same as the previous TCs for Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010.

We agree with Cessna's requests for the reasons given. We have changed paragraph (h) of this AD to include the updated AFM revisions and current TCs. However, some operators still use Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010, and therefore the TCs referenced in Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010, still apply for some affected airplanes. Therefore, paragraph (h) of this AD clarifies the changes to the AFM as they apply to airplanes using Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010, and to airplanes using Cessna 680 Citation Sovereign AFM, Revision 10, dated June 30, 2011. These changes will not result in an additional burden to the operator.

We have also reviewed Cessna Service Bulletin SB680-24-11, Revision 1, dated November 15, 2011. This service bulletin includes procedures to address both Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010; and Cessna 680 Citation Sovereign AFM, Revision 10, dated June 30, 2011; and their corresponding AFM actions. We have also changed paragraph (g) of this AD to reference Cessna Service Bulletin SB680-24-11, Revision 1, dated November 15, 2011. We also added paragraph (i) to the AD to give credit for actions accomplished before the effective date of the AD using Cessna Service Bulletin SB680-24-11, dated December 16, 2010, and re-identified subsequent paragraphs accordingly.

## Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously, and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 54141, August 31, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 54141, August 31, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

## Costs of Compliance

We estimate that this AD affects 198 airplanes of U.S. registry.  
We estimate the following costs to comply with this AD:

### Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Installation	4 work-hours X \$85 per hour = \$340	\$40	\$380	\$75,240

## Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This

regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):



---

**2012-07-04 Cessna Aircraft Company:** Amendment 39-17010; Docket No. FAA-2011-0913; Directorate Identifier 2011-NM-031-AD.

**(a) Effective Date**

This AD is effective May 15, 2012.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Cessna Aircraft Company Model 680 airplanes; certificated in any category; serial numbers -0001 through -0289 inclusive, and -0291 through -0296 inclusive.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 24: Electrical power.

**(e) Unsafe Condition**

This AD was prompted by a false cross-feed command to the right-hand fuel control card, due to the cross-feed inputs on the left- and right-hand fuel control cards being connected together and causing an imbalance of fuel between the left and right wing tanks. We are issuing this AD to prevent lateral imbalance of the airplane, resulting from uncontrolled fuel cross-feed, which can be corrected by deflecting the aileron trim; deflecting the aileron trim increases the pilot's workload and could exceed the airplane's limitation in a short period of time, resulting in reduced controllability of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Installation**

Within 400 flight hours or 12 months after the effective date of this AD, whichever occurs first: Install a kit, part number (P/N) SB680-24-11, to the left and right motive flow relays, in accordance with the Accomplishment Instructions of Cessna Service Bulletin SB680-24-11, Revision 1, dated November 15, 2011. The kit (P/N SB680-24-11) contains 2 sleeves, 4 splices, 2 diodes (P/N 1N4006), and instructions.

## **(h) Revise Airplane Flight Manual (AFM)**

Before further flight after accomplishing the actions required by paragraph (g) of this AD, do the applicable actions specified in paragraph (h)(1) or (h)(2) of this AD.

(1) For airplanes using Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010: Revise the Cessna 680 Citation Sovereign AFM to include the information in Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-13, dated October 15, 2010, and remove the temporary changes (TCs) identified in paragraphs (h)(1)(i) through (h)(1)(iv) of this AD. Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-13, dated October 15, 2010, introduces procedures to use when the left or right generator is selected OFF. Operate the airplane according to the procedures in Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-13, dated October 15, 2010.

(i) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-09, dated October 15, 2010.

(ii) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-10, dated October 15, 2010.

(iii) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-11, dated October 15, 2010.

(iv) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-12, dated October 15, 2010.

Note 1 to paragraph (h)(1) of this AD: Updating Cessna 680 Citation Sovereign AFM, Revision 9, dated May 24, 2010, may be done by inserting a copy of Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-13, dated October 15, 2010, into the AFM. Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-13, dated October 15, 2010, should be removed and discarded when Revision 10, dated June 30, 2011, has been collated into the basic airplane flight manual.

(2) For airplanes using the Cessna 680 Citation Sovereign AFM, Revision 10, dated June 30, 2011: Revise the Cessna 680 Citation Sovereign AFM, Revision 10, dated June 30, 2011, by removing the TCs identified in paragraphs (h)(2)(i) through (h)(2)(iii) of this AD.

(i) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R10-01, dated June 30, 2011.

(ii) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R10-02, dated June 30, 2011.

(iii) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R10-03, dated June 30, 2011.

## **(i) Credit for Previous Actions**

This paragraph provides credit for the installation required by paragraph (g) of this AD, if the installation was performed before the effective date of this AD using Cessna Service Bulletin SB680-24-11, dated December 16, 2010.

## **(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita Aircraft Certification Office (ACO), ACE-115W, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

## **(k) Related Information**

For more information about this AD, contact Nhien Hoang, Aerospace Engineer, Electrical Systems and Avionics Branch, ACE-119W, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; phone: (316) 946-4190; fax: (316) 946-4107; email: nhien.hoang@faa.gov.

## **(l) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(i) Cessna Service Bulletin SB680-24-11, Revision 1, dated November 15, 2011.

(ii) Cessna Temporary FAA Approved Airplane Flight Manual Change 68FM TC-R09-13, dated October 15, 2010, to the Cessna 680 Citation Sovereign Airplane Flight Manual, Revision 9, dated May 24, 2010.

(2) For service information identified in this AD, contact Cessna Aircraft Co., P.O. Box 7706, Wichita, Kansas 67277; telephone 316-517-6215; fax 316-517-5802; email citationpubs@cessna.texttron.com; Internet <https://www.cessnasupport.com/newlogin.html>.

(3) You may review copies of the service information at the FAA, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call (425) 227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this of this material at an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on March 22, 2012.

Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.