DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-1107; Directorate Identifier 2009-NM-263-AD; Amendment 39-16600; AD 2011-03-16]

RIN 2120-AA64

Airworthiness Directives; The Cessna Aircraft Company Model 750 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD requires an inspection to determine the serial numbers of the auxiliary power unit (APU) generator and the left and right engine direct current (DC) generators, and corrective actions if necessary. This AD also requires revising the airplane flight manual. This AD was prompted by a report of a DC generator overvoltage event which caused smoke in the cockpit and damage to numerous avionics and electrical components. We are issuing this AD to detect and correct an overvoltage condition on the DC electrical busses caused by exciter stator winding failures, and subsequent failure of the generator control unit (GCU) overvoltage protection circuitry, which could result in damage to critical electrical and avionics components.

DATES: This AD is effective March 22, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of March 22, 2011.

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; e-mail citationpubs@cessna.textron.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: Raymond Johnston, Aerospace Engineer, Electrical Systems and Avionics, ACE-119W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; phone: 316-946-4197; fax: 316-946-4107; e-mail: Raymond.Johnston@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to the specified products. That NPRM published in the Federal Register on November 9, 2010 (75 FR 68731). That NPRM proposed to require an inspection to determine the serial numbers of the auxiliary power unit (APU) generator and the left and right engine direct current (DC) generators, and related corrective actions if necessary. That NPRM also proposed to require revising the airplane flight manual.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA’s response to each comment.

Request To Verify Applicability

The European Aviation Safety Agency (EASA) requested clarification regarding the applicability of the NPRM. The EASA noted that the applicability in paragraph (c) of the NPRM applies to Cessna Model 750 airplanes having serial numbers -0222 and -0225 and subsequent. The EASA noted that paragraph (i) of the NPRM states that no person may install any Pacific Scientific generators having part number 92841-1 (9914752-1) that has serial numbers 060 through 297 without suffix "C" on any airplane. The EASA asked if there is a chance that the affected generators could be installed on other Model 750 airplanes with serial numbers that are not identified in paragraph (c) of the NPRM.

We agree to clarify. Cessna Model 750 airplanes having lower serial numbers use only Goodrich generators, which are not affected by the identified unsafe condition. We have not changed the final rule in regard to this issue.

Request To Change Paragraph Identifier in Note 1 of the NPRM

Cessna requested that we change the paragraph identifier in Note 1 of the NPRM to specify paragraph (h), not paragraph (g) of the NPRM, because paragraph (h) of the NPRM contained the AFM revisions.

We agree. We revised this AD as requested.
Request To Remove the Compliance Time

Cessna requested that we remove the compliance time of "before further flight" from the Relevant Service Information section and paragraph (g) of the NPRM. Cessna did not provide a reason for its request.

We partially agree. We agree that the information in the Relevant Service Information and the Cessna service letter should match; however, the Relevant Service Information section is not contained in the final rule. We do not agree with the request to change the compliance time in paragraph (g) of the final rule. By the time this AD is issued, there will not be an issue with parts availability and if an affected generator is found to be installed, it should be replaced immediately. However, operators may request approval of an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD. We have not changed the final rule in regard to this issue.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the change described previously. We also determined that this change 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 67 airplanes of U.S. registry. We also estimate that it takes up to 10 work-hours per product to comply with this AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be up to $56,950, or $850 per product.

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):
2011-03-16 The Cessna Aircraft Company: Amendment 39-16600; Docket No. FAA-2010-1107; Directorate Identifier 2009-NM-263-AD.

Effective Date

(a) This AD is effective March 22, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Cessna Aircraft Company Model 750 airplanes, certificated in any category, having serial numbers -0222, and -0225 and subsequent.

Subject

(d) Air Transport Association (ATA) of America Code 24: Electrical power.

Unsafe Condition

(e) This AD results from a report of a direct current (DC) generator overvoltage event which caused smoke in the cockpit and damage to numerous avionics and electrical components. The Federal Aviation Administration is issuing this AD to detect and correct an overvoltage condition on the DC electrical busses caused by exciter stator winding failures, and subsequent failure of the generator control unit overvoltage protection circuitry, which could result in damage to critical electrical and avionics components.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Inspection

(g) For airplanes having serial numbers -0222, -0225 through -0293 inclusive, -0295, -0296, and -0298: Within 6 months or 600 flight hours after the effective date of this AD, whichever occurs later, inspect to determine the serial number of the auxiliary power unit (APU) generator and the left and right engine 400 amp DC generators, in accordance with the Accomplishment Instructions of Cessna Service Letter SL750-24-08, dated August 13, 2009. For airplanes that have one or more generators having a serial number 060 through 297 inclusive without suffix "C," before further flight, replace the affected generator(s) with a new or serviceable generator, in accordance with the Accomplishment Instructions of Cessna Service Letter SL750-24-08, dated August 13, 2009.
Revision of the Airplane Flight Manual (AFM)

(h) For airplanes having serial numbers -0222, and -0225 and subsequent: Within 30 days after the effective date of this AD, revise Section II, Operating Limitations, Generator Limitations, page 2-12, of the applicable airplane flight manual (AFM) to include the information in the applicable Cessna temporary change (TC) required by paragraph (h)(1), (h)(2), or (h)(3) of this AD. These TCs introduce procedures for resetting the APU generator. Operate the airplane according to the limitations and procedures in the TCs.

(1) For Model 750 Citation X airplanes (750-0173 and on and airplanes incorporating Cessna Service Bulletin SB750-71-10): Insert Cessna TC 75FMA TC-R01-46, dated April 23, 2009.

(2) For Model 750 Citation X airplanes (750-0173 and on and airplanes incorporating Cessna Service Bulletin SB750-71-10): Insert Cessna TC 75EUA TC-R01-35, dated May 8, 2009.

(3) For Model 750 Citation X airplanes (750-0173 and on and airplanes incorporating Cessna Service Bulletin SB750-71-10): Insert Cessna TC 75EUMA TC-R01-35, dated May 8, 2009.

Note 1: The AFM revisions required by paragraph (h) of this AD may be done by inserting copies of Cessna TCs 75FMA TC-R01-46, dated April 23, 2009; 75EUA TC-R01-35, dated May 8, 2009; or 75EUMA TC-R01-35, dated May 8, 2009; into the applicable AFM. When these TCs have been included in general revisions of the applicable AFM, the general revisions may be inserted into the applicable AFM, provided the relevant information in the general revision is identical to that in the applicable TC.

Parts Installation

(i) As of the effective date of this AD, no person may install any Pacific Scientific generator having part number 92841-1 (9914752-1) that has serial numbers 060 through 297 without the suffix "C" on any airplane.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Wichita Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Raymond Johnston, Aerospace Engineer, Electrical Systems and Avionics, ACE-119W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4197; fax (316) 946-4107.

(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.

Related Information

(k) For more information about this AD, contact Raymond Johnston, Aerospace Engineer, Electrical Systems and Avionics, ACE-119W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; phone: 316-946-4197; fax: 316-946-4107; e-mail: Raymond.Johnston@faa.gov.

Material Incorporated by Reference

(l) You must use the service information specified in table 1 of this AD to do the actions required by this AD, unless the AD specifies otherwise.
### Table 1 – All material incorporated by reference

<table>
<thead>
<tr>
<th>Document</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessna Temporary Change (TC) 75FMA TC-R01-46 to the Section II, Operating Limitations, Generator Limitations, page 2-12</td>
<td>April 23, 2009</td>
</tr>
<tr>
<td>Cessna TC 75EUA TC-R01-35 to the Section II, Operating Limitations, Generator Limitations, page 2-12</td>
<td>May 8, 2009</td>
</tr>
<tr>
<td>Cessna TC 75EUMA TC-R01-35 to the Section II, Operating Limitations, Generator Limitations, page 2-12</td>
<td>May 8, 2009</td>
</tr>
<tr>
<td>Cessna Service Letter SL750-24-08</td>
<td>August 13, 2009</td>
</tr>
</tbody>
</table>

(1) The Director of the Federal Register approved the incorporation by reference of the service information specified in table 1 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

(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; e-mail citationpubs@cessna.textron.com; Internet https://www.cessnasupport.com/newlogin.html.

(3) You may review copies of the 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.

(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 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.

Issued in Renton, Washington, on January 28, 2011.

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