



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2010-1084; Directorate Identifier 2010-CE-056-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Cessna Aircraft Company**

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

**ACTION:** Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

**SUMMARY:** We are revising an earlier proposed airworthiness directive (AD) for all Cessna Aircraft Company (Cessna) Model 402C airplanes modified by Supplemental Type Certificate (STC) SA927NW and Model 414A airplanes modified by STC SA892NW. That NPRM proposed a complete inspection of the flap system and modification of the flap control system. That NPRM was prompted by a report of a Cessna Model 414A airplane modified by STC SA892NW that experienced an asymmetrical flap condition causing an uncommanded roll when the pilot set the flaps to the approach position. This action revises that NPRM by incorporating additional service information that addresses proper rigging procedures and corrective actions following additional inspection procedures. We are proposing this supplemental NPRM to correct the unsafe condition on these products. Since these actions impose an additional burden over that proposed in the NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

**DATES:** We must receive comments on this supplemental NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Sierra Industries, Ltd, 122 Howard Langford Drive, Uvalde, Texas 78801; telephone: 888-835-9377; email: [info@sijet.com](mailto:info@sijet.com); Internet: <http://www.sijet.com>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

### **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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Michael A. Heusser, Program Manager, Fort Worth Airplane Certification Office, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; phone: (817) 222-5038; fax: (817) 222-5160; email: michael.a.heusser@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2010-1084; Directorate Identifier 2010-CE-056-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

We issued an NPRM to amend 14 CFR part 39 to include an AD that would apply to all Cessna Aircraft Company (Cessna) Model 402C airplanes modified by Sierra Industries, Ltd. Supplemental Type Certificate (STC) SA927NW and Model 414A airplanes modified by STC SA892NW (both STCs formerly held by Robertson Aircraft Corporation). That NPRM published in the Federal Register on October 29, 2010 (75 FR 66700).

That NPRM (75 FR 66700, October 29, 2010) was prompted by a report that a Cessna Model 414A airplane, which was modified by STC SA892NW, had an asymmetrical flap condition that caused an uncommanded roll when the pilot set the flaps to the approach position.

The flap preselect cable connects to the arm assembly and provides the flap position to the flap selector to close the position loop for the flap position. Micro switches are located on the arm assembly and provide the electrical signal for the arm position.

STC SA927NW and STC SA892NW use the original production preselect cable. However, the STCs added an extension to the arm assembly that requires increased travel of the preselect cable to obtain the same rotation as previously obtained with the shorter arm assembly. To obtain the same arm assembly rotation, the preselect cable must travel approximately an additional .75 inch. However, the original cable has internal mechanical stops that prevent it from traveling the additional distance. The cable's internal stops are contacted by a smaller rotation displacement of the arm assembly. Since more linear displacement of the cable is required to obtain the same switch action, the internal mechanical stops of the cable are reached before the switches designed to stop the motion of the flaps activate.

As a result, when the internal stops in the cable are contacted, the rotation of the arm assembly carrying the micro switches stops and the switch to stop the drive motor is not activated. Because the switch is not activated, the motor continues to run until either the motor drive shear pin fails, a cable breaks, the structural bracket breaks, or the secondary switches stop the motor before something breaks. The sequence was verified on the reported airplane by the rigging, installation, and operation of an STC production configuration.

That NPRM (75 FR 66700, October 29, 2010) proposed to require a complete inspection of the flap system and modification of the flap control system.

This condition, if not corrected, could result in an asymmetrical flap condition with consequent loss of control.

#### **Actions Since Previous NPRM was Issued**

During a subsequent flight after issuance of that NPRM (75 FR 66700, October 29, 2010), additional issues on the flap control system were discovered. The service information called out in the initial NPRM did not address these additional issues. Further investigation determined that the lack of a proper rigging procedure was a contributing factor in the flap issues.

Sierra Industries, Ltd. has issued Instructions for Continued Airworthiness, 82-1, Issue 1, dated June 12, 2012, which incorporates proper rigging procedures and corrective actions following additional inspection procedures.

#### **Comments**

We gave the public the opportunity to comment on the original NPRM (75 FR 66700, October 29, 2010). We received no comments on that NPRM or on the determination of the cost to the public.

#### **FAA's Determination**

We are proposing this supplemental NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs. Certain changes described above expand the scope of the original NPRM (75 FR 66700, October 29, 2010). As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this supplemental NPRM.

### **Proposed Requirements of the Supplemental NPRM**

This supplemental NPRM would require accomplishing the actions specified in the service information proposed in the original NPRM, and require incorporation of Sierra Industries, Ltd. Instructions for Continued Airworthiness, 82-1, Issue 1, dated June 12, 2012, into the FAA-approved maintenance program.

The accomplishment and incorporation of these documents should adequately mitigate the unsafe condition.

### **Costs of Compliance**

We estimate that this proposed AD affects 150 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspect the flap system and modify/replace the flap preselect control cable	25 work-hours X \$85 per hour = \$2,125	\$1,000	\$3,125	\$468,750

### **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**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the 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.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

**Cessna Aircraft Company:** Docket No. FAA-2010-1084; Directorate Identifier 2010-CE-056-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Cessna Aircraft Company (Cessna) Model 402C airplanes modified by Supplemental Type Certificate (STC) SA927NW and Model 414A airplanes modified by STC SA892NW, all serial numbers, that are certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

**(e) Unsafe Condition**

This AD was prompted by a report of a Cessna Model 414A airplane modified by STC SA892NW that experienced an asymmetrical flap condition causing an uncommanded roll when the pilot set the flaps to the approach position. We are issuing this AD to prevent failure of the flap system, which could result in an asymmetrical flap condition. This condition could result in loss of control.

**(f) Compliance**

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

**(g) Inspection of the Flap Control System**

Within 60 days after the effective date of this AD, do a complete inspection of the flap control system following the Inspection Instructions section of Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

**(h) Modification of the Flap Control System**

(1) If any damage to the flap bellcrank or bellcrank mounting structure is found in the inspection required in paragraph (g) of this AD, before further flight, repair the damage and modify the flap control system following the Accomplishment Instructions of Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

(2) If no damage to the flap bellcrank or bellcrank mounting structure is found in the inspection required in paragraph (g) of this AD, within 180 days after the effective date of this AD, modify the flap control system following the Accomplishment Instructions of Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

**(i) Instructions for Continued Airworthiness**

Within 7 months after the effective date of this AD, or during your next annual inspection, whichever occurs earlier, incorporate Sierra Industries, Ltd. Instructions for Continued Airworthiness, 82-1, Issue 1, dated June 12, 2012, into your FAA-approved maintenance program.

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

(1) The Manager, Fort Worth Airplane Certification Office, 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**

(1) For more information about this AD, contact Michael A. Heusser, Program Manager, Fort Worth ACO, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; phone: (817) 222-5038; fax: (817) 222-5160; email: michael.a.heusser@faa.gov.

(2) For service information identified in this AD, contact Sierra Industries, Ltd, 122 Howard Langford Drive, Uvalde, Texas 78801; telephone: 888-835-9377; email: info@sijet.com; Internet: <http://www.sijet.com>. You may review copies of the service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148. Issued in Kansas City, Missouri, on August 16, 2012.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-20734 Filed 08/22/2012 at 8:45 am; Publication Date: 08/23/2012]