DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
14 CFR Part 39
[Docket No. FAA-2020-0546; Project Identifier 2020-CE-001-AD; Amendment 39-21137; AD 2020-03-50]
RIN 2120-AA64
Airworthiness Directives; Cirrus Design Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Cirrus Design Corporation (Cirrus) Model SF-50 airplanes. This AD was sent previously as an emergency AD to all known U.S. owners and operators of these airplanes. This AD requires disconnecting and removing the headset amplifier and microphone interface circuit card assemblies for the 3.5 mm audio and microphone jacks. This AD was prompted by a cabin fire incident that occurred on a Cirrus Model SF50 airplane during ground operations where the operator observed smoke exiting from behind the right sidewall interior panel. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2020-03-50, issued on February 14, 2020, which contained the requirements of this amendment.

The Director of the Federal Register approved the incorporation by reference of a certain publication identified in this AD as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
The FAA must receive comments on this AD 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 https://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Cirrus Design Corporation; 4515 Taylor Circle Duluth, MN 55811; phone: (800) 279-4322; email: info@cirrusaircraft.com; Internet: https://cirrusaircraft.com. You may view the referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0546.

**Examining the AD Docket**

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0546; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments
received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Joseph Dubusky, Aerospace Engineer, Chicago ACO Branch, FAA, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; phone: 847-294-7543; fax: 847-294-7834; email: joseph.dubusky@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On February 14, 2020, the FAA issued Emergency AD 2020-03-05, which requires disconnecting and removing the headset amplifier and microphone interface circuit card assemblies. This emergency AD was sent previously to all known U.S. owners and operators of these airplanes. This action was prompted by a cabin fire incident that occurred on a Cirrus Model SF50 airplane during ground operations. The operator observed smoke exiting from behind the right sidewall interior panel located behind crew seat 2 and forward of passenger seat 5. The investigation into the incident determined the probable root cause was a malfunction of the headset amplifier (part number (P/N) 38849-001) and the microphone interface (P/N 35809-001) circuit card assemblies for the 3.5 millimeter (mm) audio and microphone jacks. This malfunction can result in an electrical short and subsequent uncontained cabin fire without activating circuit protection.

This condition, if not addressed, could lead to an uncontained cabin fire, resulting in possible occupant injury or loss of airplane control.
Related Service Information under 1 CFR part 51

The FAA reviewed Cirrus Alert Service Bulletin Number SBA5X-23-03, dated February 7, 2020 (SBA5X-23-03). The service information contains instructions to disconnect and remove the headset amplifier and microphone interface circuit card assemblies for the 3.5 mm audio and microphone jacks. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA’s Determination

The FAA is issuing this AD because it evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires accomplishing the actions specified in SBA5X-23-03 as described previously.

FAA’s Justification and Determination of the Effective Date

An unsafe condition exists that required the immediate adoption of Emergency AD 2020-03-50, issued on February 14, 2020, to all known U.S. owners and operators of these airplanes. The FAA found that the risk to the flying public justified waiving notice and comment prior to adoption of this rule because immediate corrective action was necessary to prevent an electrical short and subsequent uncontained cabin fire, which could result in occupant injury or loss of airplane control. These conditions still exist and the AD is hereby published in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reasons stated above, the FAA finds that good cause exists for making this amendment effective in less than 30 days.
Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include Docket Number FAA-2020-0546 and Project Identifier 2020-CE-001-AD at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

The FAA will post all comments the FAA receives, without change, to https://www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact that is received about this final rule.

Costs of Compliance

The FAA estimates that this AD affects 173 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove audio and microphone</td>
<td>6 work-hours X $85 per hour = $510</td>
<td>N/A</td>
<td>$510</td>
<td>$88,230</td>
</tr>
<tr>
<td>circuit cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does control warranty coverage for affected individuals. As a result, the FAA has included all costs in its cost estimate.
**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.

The FAA is 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 Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

**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, and

(2) Will not affect intrastate aviation in Alaska.
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:

2020-03-50 Cirrus Design Corporation: Amendment 39-21137; Docket No. FAA-2020-0546; Project Identifier 2020-CE-001-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2020-03-50, issued on February 14, 2020, which contained the requirements of this amendment.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Cirrus Design Corporation (Cirrus) Model SF50 airplanes, serial numbers 0005 through 0176 and 0178, certificated in any category.
(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 23; Communications.

(e) Unsafe Condition

This AD was prompted by a cabin fire incident that occurred on a Cirrus Model SF50 airplane during ground operations. The investigation into the incident determined the probable root cause was a malfunction of the headset amplifier (part number (P/N) 38849-001) and the microphone interface (P/N 35809-001) circuit card assemblies for the 3.5 millimeter (mm) audio and microphone jacks. The FAA is issuing this AD to prevent an electrical short and subsequent uncontained cabin fire, which could result in occupant injury or loss of airplane control.

(f) Compliance

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

(g) Corrective Action

Before further flight, disconnect and remove the headset amplifier and microphone interface circuit card assemblies by following the Accomplishment Instructions, steps A. and G. through K., of Cirrus Alert Service Bulletin Number SBA5X-23-03, dated February 7, 2020.

(h) Special Flight Permit

Special flight permits are prohibited.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Chicago ACO Branch, 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 certification office, send it to the attention of the person identified in paragraph (j) 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.

(j) Related Information

For more information about this AD, contact Joe Dubusky, Aerospace Engineer, Chicago ACO Branch, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-7543; fax: 847-294-7834; email: joseph.dubusky@faa.gov.

(k) Material Incorporated by Reference

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

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.


(ii) [Reserved]

(3) For the service information identified in this AD, contact Cirrus Design Corporation, Cirrus Design Corporation; 4515 Taylor Circle Duluth, MN 55811; phone: (800) 279-4322; email: info@cirrusaircraft.com; Internet: https://cirrusaircraft.com.

(4) You may view the referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.
(5) You may view the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For more information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.


Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-12498 Filed: 6/10/2020 8:45 am; Publication Date: 6/11/2020]