



This document is scheduled to be published in the Federal Register on 11/02/2011 and available online at <http://federalregister.gov/a/2011-28382>.

[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2011-1212; Directorate Identifier 2011-CE-034-AD]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Cirrus Design Corporation Airplanes**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Cirrus Design Corporation (Cirrus) Model SR22T airplanes. This proposed AD was prompted by reports of partial loss of engine power due to a dislodged rubber gasket/seal being ingested into the turbocharger. This proposed AD would require inspection and modification of the air box flange welds and slots and installation of induction system air box seals as applicable. We are proposing this AD to correct the unsafe condition on these products.

**DATES:** We must receive comments on this proposed 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 <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: 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 proposed AD, contact Cirrus Design Corporation, 4515 Taylor Circle, Duluth, Minnesota 55811-1548, phone: 218-788-3000; fax: 218-788-3525; email: [fieldservice@cirrusaircraft.com](mailto:fieldservice@cirrusaircraft.com); Internet: <http://www.cirrusaircraft.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 Downs, Propulsion Engineer, Chicago ACO, FAA, O'Hare Lake Office Center, 2300 East Devon Ave., Des Plaines, Illinois 60018; phone: (847) 294-7870; fax: (847) 294-7834; e-mail: [michael.downs@faa.gov](mailto:michael.downs@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2011-1212; Directorate Identifier 2011-CE-034-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 received two reports of partial loss of engine power due to dislodged rubber gaskets/seals being ingested into one of the two turbochargers. The gasket/seal is located between the air-box mounting base and the turbochargers. Once the gasket/seal is ingested into a turbocharger the engine will experience a partial loss of power as the turbocharger fails to perform its function. A complete loss of power could occur if metal debris from the failing turbocharger migrates into the engine oil system and damages other engine components. Examination by Cirrus of other Cirrus Model SR22T airplanes showed early evidence of the gasket/seal starting to dislodge on at least one other airplane.

This condition, if not corrected, could result in engine failure.

### **Relevant Service Information**

We reviewed Cirrus Design Corporation SR22T Service Bulletin SB 2X-71-17 R1, dated September 30, 2011. The service information describes procedures for replacement of the air box seals.

### **FAA's Determination**

We are proposing this AD because we 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.

## Proposed AD Requirements

This proposed AD would require inspection and modification of the air box flange welds and slots and installation of air box seals and adhesive with materials better suited for the high-temperature environment encountered in close proximity to the turbocharger.

## Costs of Compliance

We estimate that this proposed AD affects 67 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of the induction system air box seals and extension of air box flange slots.	2.5 work-hours X \$85 per hour = \$212.50	\$139	\$351.50	\$23,550.50

According to the manufacturer, all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our 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.

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):

**Cirrus Design Corporation:** Docket No. FAA-2011-1212; Directorate Identifier 2011-CE-034-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 the following model and serial number airplanes, certificated in any category:

(1) Group 1 Airplanes: Cirrus Design Corporation Model SR22T airplanes, serial numbers 0001 through 0169, except 0004, 0019, 0027, 0047, 0097, 0126, 0127, 0135, 0138, 0139, 0144, 0154, 0155, 0157, 0158, 0159, 0160, 0161, and 0163.

(2) Group 2 Airplanes: Cirrus Design Corporation Model SR22T airplanes, serial numbers 0004, 0019, 0027, 0047, 0097, 0126, 0127, 0135, 0138, 0139, 0144, 0155, 0157, 0158, 0160, and 0161. These airplanes had the reinforced silicone fiberglass seals installed at the factory but the box flange welds and slots may be incorrectly modified. Therefore, this AD still applies to these airplanes.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7160, Engine Air Intake.

**(e) Unsafe Condition**

This AD was prompted by reports of partial loss of engine power due to a dislodged rubber gasket/seal being ingested into the turbocharger. We are issuing this AD to inspect and modify the air box flange welds and slots and install induction system air box seals as applicable.

**(f) Compliance**

Comply with this AD following Cirrus Design Corporation SR22T Service Bulletin SB 2X-71-17 R1, dated September 30, 2011, within the compliance times specified, unless already done.

**(g) Actions**

(1) Group 1 Airplanes: Within the next 10 hours time-in-service (TIS) after the effective date of this AD, inspect the air box flange welds and slots, make modifications as necessary, and replace the induction air box seals with reinforced silicone fiberglass seals part number 29486-001.

(2) Group 2 Airplanes: Within the next 10 hours TIS after the effective date of this AD, inspect the air box flange welds and slots and, as necessary, make modifications.

NOTE: Credit will be given for actions required in paragraphs (g)(1) and (g)(2) of this AD if already done before the effective date of this AD following Cirrus Design Corporation SR22T Service Bulletin SB 2X-71-17, dated July 21, 2011.

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

(1) The Manager, Chicago Aircraft Certification Office (ACO), 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.

(i) **Related Information**

(1) For more information about this AD, contact Michael Downs, Propulsion Engineer, Chicago ACO, FAA, O'Hare Lake Office Center, 2300 East Devon Ave., Des Plaines, Illinois 60018; phone: (847) 294-7870; fax: (847) 294-7834; e-mail: michael.downs@faa.gov.

(2) For service information identified in this AD, contact Cirrus Design Corporation, 4515 Taylor Circle, Duluth, Minnesota 55811-1548, phone: 218-788-3000; fax: 218-788-3525; email: fieldservice@cirrusaircraft.com; Internet: <http://www.cirrusaircraft.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.

Issued in Kansas City, Missouri, on October 27, 2011.

John R. Colomy,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2011-28382 Filed 11/01/2011 at 8:45 am; Publication Date: 11/02/2011]