

## SERVICE INFORMATION No. SI 40-142

**NOTE:** SI's are used only:  
1) To distribute information from DAI to our customers.  
2) To distribute applicable information/documents from our suppliers to our customers with additional information.  
Typically there is no revision service for SI's. Each new information or change of that will be sent along with a new SI.

### I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

DA 40 airplanes S/N 40.006 through 40.009, 40.011 through 40.1071, 40.1073 through 40.1077

DA 40 F airplanes S/N 40.FC001 through 40.FC029

#### 1.2 Subject:

FAA Airworthiness Directive No. 2013-24-14

ATA-Code: 57-00

#### 1.3 Reason:

FAA has issued Airworthiness Directive No. 2013-24-14 mandating a modification of the aft main spar in the cabin area for the above mentioned Airplane Serial Numbers. Serial numbers with modified aft main spars are eligible for an increased Major Structural Inspection threshold of 6000 Flight Hours since first flight and 4000 flight hours thereafter.

#### 1.4 Information:

For detailed technical information refer to FAA AD 2013-24-14 which is applicable without any further additions or restrictions.

### II. OTHERS

The FAA AD 2013-24-14 is attached to this Service Information.

In case of doubt contact Diamond Aircraft Industries GmbH.

[Federal Register Volume 78, Number 232 (Tuesday, December 3, 2013)]  
[Rules and Regulations]  
[Pages 72568-72570]  
From the Federal Register Online via the Government Printing Office [www.gpo.gov]  
[FR Doc No: 2013-28746]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2013-0812; Directorate Identifier 2013-CE-023-AD; Amendment 39-17689; AD 2013-24-14]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Diamond Aircraft Industries GmbH Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for Diamond Aircraft Industries GmbH Models DA40 and DA40F airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as fatigue strength found in the aft main spar does not ensure unlimited lifetime structural integrity. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective January 7, 2014.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of January 7, 2014.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at 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 service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Str.5, A-2700 Wiener Neustadt, Austria; telephone: +43 2622 26700; fax: +43 2622 26780; email: [office@diamond-air.at](mailto:office@diamond-air.at); Internet: <http://www.diamondaircraft.com/contact/technical.php>. 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.

**FOR FURTHER INFORMATION CONTACT:** Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: [mike.kiesov@faa.gov](mailto:mike.kiesov@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 September 17, 2013 (78 FR 57104). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Structural fatigue testing of the DA 40 aeroplane carried out for an extension of the Major Structural Inspection (MSI) interval has shown that the fatigue strength of the aft main spar in the cabin area does not ensure unlimited lifetime.

This condition, if not corrected, could adversely affect the structural integrity of the aeroplane.

Diamond Aircraft Industries (DAI) issued Mandatory Service Bulletin (MSB) 40-074/MSB D4-094/MSB F4-028, including Work Instruction (WI) WI-MSB 40-074/WI-MSB D4-094/WI-MSB F4-028 (published as a single document), providing instructions to reinforce the aft main spar in the cabin area.

For the reasons described above, this AD requires modification of the aft main spar in the cabin area.

Note: Aeroplanes with modified aft main spar are eligible for an increased MSI threshold of 6000 flight hours (FH) since first flight of the aeroplane and increased MSI intervals not to exceed 4000 FH thereafter.

The MCAI can be found in the AD docket on the Internet at:  
<http://www.regulations.gov/#!documentDetail;D=FAA-2013-0812-0002>.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 57104, September 17, 2013) or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 57104, September 17, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 57104, September 17, 2013).

### **Costs of Compliance**

We estimate that this AD will affect 747 products of U.S. registry. We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$100 per product.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$455,670, or \$610 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**

We determined that 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 this AD:

- (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.

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

### **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 AD:



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**2013-24-14 Diamond Aircraft Industries GmbH:** Amendment 39-17689; Docket No. FAA-2013-0812; Directorate Identifier 2013-CE-023-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective January 7, 2014.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Diamond Aircraft Industries Model DA 40 airplanes, serial numbers 40.006 through 40.009, 40.011 through 40.1071, and 40.1073 through 40.1077; and Model DA 40 F airplanes, serial numbers 40.FC001 through 40.FC029; certificated in any category.

**(d) Subject**

Air Transport Association of America (ATA) Code 57: Wings.

**(e) Reason**

This AD was prompted from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as fatigue strength found in the aft main spar does not ensure unlimited lifetime structural integrity. We are issuing this AD to modify the aft main spar in the cabin area to ensure the structural integrity of the airplane.

**(f) Actions and Compliance**

Unless already done, at or before the next Major Structural Inspection (MSI) after the effective date of this AD or within the next 114 months after January 7, 2014 (the effective date of this AD), whichever occurs first, modify the aft main spar in the cabin area following the INSTRUCTIONS section of Diamond Aircraft Industries GmbH Work Instructions WI-MSB 40-074, WI-MSB D4-094, and WI-MSB F4-028 (co-published as a single document), dated May 10, 2013, as specified in Diamond Aircraft Industries GmbH Mandatory Service Bulletins (MSB) 40-074, D4-094, and F4-028 (co-published as a single document), dated May 10, 2013.

**(g) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards 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: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane

Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **(h) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, EASA AD No.: 2013-0145, dated July 15, 2013, for more information. You may examine the AD on the Internet at <http://www.regulations.gov> by searching and locating it in Docket No. FAA-2013-0812.

#### **(i) 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.

(i) Diamond Aircraft Industries GmbH Mandatory Service Bulletin 40-074, dated May 10, 2013.

(ii) Diamond Aircraft Industries GmbH Mandatory Service Bulletin D4-094, dated May 10, 2013.

(iii) Diamond Aircraft Industries GmbH Mandatory Service Bulletin F4-028, dated May 10, 2013.

Note 1 to paragraphs (i)(2)(i) through (i)(2)(iii) of this AD: Diamond Aircraft Industries GmbH Mandatory Service Bulletin 40-074, dated May 10, 2013; Diamond Aircraft Industries GmbH Mandatory Service Bulletin D4-094, dated May 10, 2013; Diamond Aircraft Industries GmbH Mandatory Service Bulletin F4-028, dated May 10, 2013; are co-published as one document.

(iv) Diamond Aircraft Industries GmbH Work Instruction WI-MSB 40-074, dated May 10, 2013.

(v) Diamond Aircraft Industries GmbH Work Instruction WI-MSB D4-094, dated May 10, 2013.

(vi) Diamond Aircraft Industries GmbH Work Instruction WI-MSB F4-028, dated May 10, 2013.

Note 2 to paragraphs (i)(2)(iv) through (i)(2)(vi) of this AD: Diamond Aircraft Industries GmbH Work Instruction WI-MSB 40-074; Diamond Aircraft Industries GmbH Work Instruction WI-MSB F4-028; dated May 10, 2013; and Diamond Aircraft Industries GmbH Work Instruction WI-MSB F4-028 dated May 10, 2013; are co-published as one document.

(3) For Diamond Aircraft Industries service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Str.5, A-2700 Wiener Neustadt, Austria; telephone: +43 2622 26700; fax: +43 2622 26780; email: [office@diamond-air.at](mailto:office@diamond-air.at); Internet: <http://www.diamondaircraft.com/contact/technical.php>.

(4) You may view this 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.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on November 22, 2013.  
Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.