

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-27974 Directorate Identifier 2007-CE-040-AD; Amendment 39-15164; AD 2007-17-06]

RIN 2120-AA64

Airworthiness Directives; Diamond Aircraft Industries GmbH Model DA 40 and DA 40F Airplanes

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

ACTION: Final Rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. 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:

A nose landing gear leg failed in area of the nose gear leg pivot axle. This airplane was mostly operated on grass runways and training operations. This failure was based on a fatigue crack developed in the pivot axle. Material inspections figured out that this cracks may also develop on other serial No. pending the type of operation.

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective September 25, 2007.

On September 25, 2007, the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

ADDRESSES: You may examine the AD docket on the Internet at <http://dms.dot.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 FURTHER INFORMATION CONTACT: Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; fax: (816) 329-4090.

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 May 17, 2007 (72 FR 27768). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

A nose landing gear leg failed in area of the nose gear leg pivot axle. This airplane was mostly operated on grass runways and training operations. This failure was based on a fatigue crack developed in the pivot axle. Material inspections figured out that this cracks may also develop on other serial No. pending the type of operation.

The MCAI requires repetitively inspecting the nose landing gear leg for cracks and replacing the nose landing gear leg if cracks are found.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Comment Issue No. 1: Change the Compliance Time for the Initial and Repetitive Inspections

Colin Summers, Dan Montgomery, Michael A. Rigg, and Van A. Lupo state that the NPRM is based on a single incident where the airplane was used for training on a grass strip, and Diamond Aircraft issued a mandatory service bulletin requiring inspection of the nosewheel pivot pin for airplanes flying out of grass runways.

Two of the commenters state that they operate their airplane out of paved runways and fly less than 500 hours a year. Requiring inspections every 200 hours seems more than what the situation warrants.

We infer the commenters feel the proposed initial inspection compliance time of "within the next 100 hours time-in-service (TIS) after the effective date of this AD" and the repetitive inspection requirement of "every 200 hours TIS thereafter" is unwarranted and too burdensome.

The commenters request the compliance time for the initial and repetitive inspections be changed to the next annual inspection.

We partially agree with the commenters. We cannot enforce a compliance time of "at the next annual inspection after the effective date of this AD." Such a compliance time could cause an increased burden on the owner/operator if their annual inspection came due the day after this AD becomes effective, which would ground the airplane. Unless it is determined to be an urgent safety of flight condition, we are required to give owner/operators a grace period after the AD becomes effective to schedule the airplane for maintenance. We can provide a compliance time of 12 months to coincide with annual inspections.

We will change the compliance times for the initial and repetitive inspections in this final rule AD action to add 12 months and change to 200 hours TIS (whichever occurs later) to allow more time for scheduling purposes and to lessen the burden from the compliance time proposed in the NPRM.

Comment Issue No. 2: AD Unwarranted

Daniel P. Ferry, Jr. of Ferry Aviation LLC states the need for an AD requiring an inspection is unwarranted. He states that the existing service bulletin is adequate to ensure safety, and the problem does not seem widespread or a severe safety risk.

We infer the commenter wants the NPRM withdrawn.

We do not agree with the commenter. We have examined the information provided by the MCAI and determined that an unsafe condition does exist that warrants AD action. Issuing an AD is the only way we can mandate that the instructions and procedures in a service bulletin are followed.

We are not changing the final rule AD action based on this comment.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD will affect 476 products of U.S. registry. We also estimate that it will take about 1 work-hour per product to comply with basic requirements of this AD. The average labor rate is \$80 per work-hour.

Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$38,080 or \$80 per product.

In addition, we estimate that any necessary follow-on actions will take about 8 work-hours and require parts costing \$1,715, for a cost of \$2,355 per product. We have no way of determining the number of products that may need these actions.

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 DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD Docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://dms.dot.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:



2007-17-06 Diamond Aircraft Industries GmbH: Amendment 39-15164; Docket No. FAA-2007-27974; Directorate Identifier 2007-CE-040-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective September 25, 2007.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to the following airplanes certificated in any category:

Model	Serial Nos.
DA 40	All serial numbers beginning with 40.006.
DA 40F	All serial numbers beginning with 40.F001.
	All serial numbers beginning with 40.FC001.

Subject

- (d) Air Transport Association of America (ATA) Code 32: Landing Gear.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

A nose landing gear leg failed in area of the nose gear leg pivot axle. This airplane was mostly operated on grass runways and training operations. This failure was based on a fatigue crack developed in the pivot axle. Material inspections figured out that this cracks may also develop on other serial No. pending the type of operation.

Actions and Compliance

- (f) Unless already done, do the following actions:
- (1) Inspect the nose landing gear leg for cracks as follows.
 - (i) Initially within the next 12 months after September 25, 2007 (the effective date of this AD) or within the next 200 hours time-in-service (TIS) after September 25, 2007 (the effective date of this AD), whichever occurs later.
 - (ii) Repetitively inspect thereafter at intervals not to exceed 12 months or 200 hours TIS, whichever occurs later.

(2) Replace the nose landing gear leg before further flight after any inspection required by paragraph (f)(1) of this AD in which cracks are found.

(3) After doing the replacement required in paragraph (f)(2) of this AD, repetitively inspect at intervals not to exceed 12 months or 200 hours TIS, whichever occurs later.

(4) Do the actions required in paragraphs (f)(1), (f)(2), and (f)(3) of this AD following Diamond Aircraft Industries GmbH Mandatory Service Bulletin No. MSB40-046/1, No. MSBD4-046/1, dated April 25, 2007, and the applicable maintenance manual.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Staff, 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: Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; fax: (816) 329-4090. 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.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Austro Control AD No. A-2005-005, dated November 15, 2005; and Diamond Aircraft Industries GmbH Mandatory Service Bulletin No. MSB40-046/1, No. MSBD4-046/1, dated April 25, 2007, for related information.

Material Incorporated by Reference

(i) You must use Diamond Aircraft Industries GmbH Mandatory Service Bulletin No. MSB40-046/1, No. MSBD4-046/1, dated April 25, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Strabe 5, A-2700 Wiener Neustadt; Fax: **43-2622-26620; or e-mail: support@diamond-air.at.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106; or 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 August 10, 2007.
John Colomy,
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.
[FR Doc. E7-16098 Filed 8-20-07; 8:45 am]