Proposed Rules

Federal Register
Vol. 72, No. 165
Monday, August 27, 2007

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–28955; Directorate Identifier 2007–CE–067–AD]

RIN 2120–AA64

Airworthiness Directives; Diamond Aircraft Industries GmbH Model DA 42 Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results 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:

Recently, a double in-flight engine shut down incident occurred on a DA42 aircraft equipped with TAE125–01 engines. The BFU (German Accident Investigation Body) found the root cause to be a violation of the Airplane Flight Manual procedures (taking-off with an insufficiently charged main aircraft battery) and momentary low voltage in the electrical system of the aircraft when retracting the main landing gear. This has been the subject of Diamond Service Information (SI) 42–040 and a subsequent EASA Safety Information Notice, SIN 2007–08, issued on 18 April 2007.

The TAE125–01 and TAE125–02–99 engines, approved for installation on the DA42, are FADEC (Full Authority Digital Engine Control) controlled and are not totally independent from the aircraft electrical power supply. A significant drop of the voltage causes simultaneously a reset of the FADEC on both engines with subsequent feathering of the propeller blades. In the case of an empty battery this scenario may be considered as catastrophic at the aircraft level.

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by September 26, 2007.

ADDRESSES: You may send comments by any of the following methods:

- *DOT Docket Web Site:* Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- *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.
- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the instructions for submitting comments.

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 this proposed AD, 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.

FOR FURTHER INFORMATION CONTACT: Peter L. Rouse, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4135; fax: (816) 329–4090.

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–2007–28955; Directorate Identifier 2007–CE–067–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://dms.dot.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

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No: 2007–0183, dated July 2, 2007 (referred to after this as ''the MCAI''), to correct an unsafe condition for the specified products. The MCAI states:

Recently, a double in-flight engine shut down incident occurred on a DA42 aircraft equipped with TAE125–01 engines. The BFU (German Accident Investigation Body) found the root cause to be a violation of the Airplane Flight Manual procedures (taking-off with an insufficiently charged main aircraft battery) and momentary low voltage in the electrical system of the aircraft when retracting the main landing gear. This has been the subject of Diamond Service Information (SI) 42–040 and a subsequent EASA Safety Information Notice, SIN 2007–08, issued on 18 April 2007.

The TAE125–01 and TAE125–02–99 engines, approved for installation on the DA42, are FADEC (Full Authority Digital Engine Control) controlled and are not totally independent from the aircraft electrical power supply. A significant drop of the voltage causes simultaneously a reset of the FADEC on both engines with subsequent feathering of the propeller blades. In the case of an empty battery this scenario may be considered as catastrophic at the aircraft level.

The Thielert Aircraft Engines (TAE) Installation Manuals IM–02–01 Issue 4 and IM–02–02 Issue 1 have been revised to address this issue, which is the subject of EASA Airworthiness Directive (AD) 2007–0182.

The present AD, regarding the new specifications introduced by the TAE Installation Manuals, mandates installation of additional Engine Control Unit (ECU) Backup Batteries to supply electrical power to the ECU, preventing high transient power drains from causing a short-term voltage drop when insufficient power from the main battery might exist.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Diamond Aircraft Industries GmbH has issued Optional Service Bulletin No. OSB–42–050, dated August 13, 2007; and Work Instruction WI–OSB–42–050, Revision 1, dated August 20, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Differences Between This Proposed 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 have proposed different actions in this AD from those in the MCAI in order to follow FAA policies. We believe that the batteries specified in the MCAI do not fully address the unsafe condition for U.S. registered airplanes. The batteries specified in the MCAI only provide approximately 10 minutes of backup electrical power to the engine full authority digital engine controls (FADECs) in the event of an aircraft electrical failure. The FAA requires a minimum of 30 minutes of backup electrical power for the engine FADECs in the event of an aircraft electrical failure. To fully address the unsafe condition, Diamond Aircraft Industries GmbH has developed different part numbers and procedures for U.S. registered airplanes. These procedures require the installation of larger capacity batteries than the MCAI required. We have discussed this difference with EASA and they accepted that the FAA's view is different to require installation of larger capacity batteries.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 86 products of U.S. registry. We also estimate that it would take about 13 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $80 per work-hour. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these costs. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $89,440, or $1,040 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 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); 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 proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, 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 AD:

Diamond Aircraft Industries GmbH: Docket No. FAA–2007–28955; Directorate Identifier 2007–CE–067–AD.

Comments Due Date

(a) We must receive comments by September 26, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to DA 42 airplanes, all serial numbers, certificated in any category.

Subject

(d) Air Transport Association of America (ATA) Code 72: Engine.

Reason

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

Recently, a double in-flight engine shut down incident occurred on a DA42 aircraft equipped with TAE125–01 engines. The BFU (German Accident Investigation Body) found the root cause to be a violation of the Airplane Flight Manual procedures (taking-off with an insufficiently charged main aircraft battery) and momentary low voltage in the electrical system of the aircraft when retracting the main landing gear. This has been the subject of Diamond Service Information (SI) 42–040 and a subsequent EASA Safety Information Notice, SIN 2007–08, issued on 18 April 2007.

The TAE125–01 and TAE125–02–99 engines, approved for installation on the DA42, are FADEC (Full Authority Digital Engine Control) controlled and are not totally independent from the aircraft electrical power supply. A significant drop of the voltage causes simultaneously a reset of the FADEC on both engines with subsequent feathering of the propeller blades. In the case of an empty battery this scenario may be considered as catastrophic at the aircraft level.

The Thielert Aircraft Engines (TAE) Installation Manuals IM–02–01 Issue 4 and

IM–02–02 Issue 1 have been revised to address this issue, which is the subject of EASA Airworthiness Directive (AD) 2007–0182.

The present AD, regarding the new specifications introduced by the TAE Installation Manuals, mandates installation of additional Engine Control Unit (ECU) Backup Batteries to supply electrical power to the ECU, preventing high transient power drains from causing a short-term voltage drop when insufficient power from the main battery might exist.

Actions and Compliance

(f) Unless already done, do the following actions within the next 100 hours time-in-service after the effective date of this AD or within 30 days after the effective date of this AD, whichever occurs first:

(1) Modify the engine electrical system by installing additional engine control unit (ECU) backup batteries following Diamond Aircraft Industries GmbH Work Instruction WI–OSB–42–050, Revision 1, dated August 20, 2007, as referenced in Diamond Aircraft Industries GmbH Optional Service Bulletin No. OSB–42–050, dated August 13, 2007.

(2) Incorporate Diamond Aircraft Temporary Revision AMM–TR–O–M–42–129, dated July 11, 2007, into the FAA-approved maintenance program (e.g., maintenance manual). The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do this action. Make an entry in the aircraft records showing compliance with this portion of the AD following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(3) Update the airplane flight manual (AFM) by inserting a copy of Diamond Aircraft Temporary Revision TR–OÄM–42–129, dated July 11, 2007, into the AFM. The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do this action. Make an entry in the aircraft records showing compliance with this portion of the AD following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: We believe that the batteries specified in the MCAI do not fully address the unsafe condition for U.S. registered airplanes. The batteries specified in the MCAI only provide approximately 10 minutes of backup electrical power to the engine full authority digital engine controls (FADECs) in the event of an aircraft electrical failure. The FAA requires a minimum of 30 minutes of backup electrical power for the engine FADECs in the event of an aircraft electrical failure. To fully address the unsafe condition, Diamond Aircraft Industries has developed different part numbers and procedures for U.S. registered airplanes. These procedures require the installation of larger capacity batteries than the MCAI required. We have discussed this difference with EASA and they accepted that the FAA's view is different to require installation of larger capacity batteries.

Other FAA AD Provisions

(g) 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: Peter L. Rouse, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4135; 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 European Aviation Safety Agency (EASA) AD No. 2007–0183, dated July 2, 2007; Diamond Aircraft Industries GmbH Optional Service Bulletin No. OSB–42–050, dated August 13, 2007; Diamond Aircraft Industries GmbH Work Instruction WI–OSB–42–050, Revision 1, dated August 20, 2007; Diamond Aircraft Temporary Revision AMM–TR–OÄM–42–129, dated July 11, 2007; and Diamond Aircraft Temporary Revision TR–OÄM–42–129, dated July 11, 2007, for related information.

Issued in Kansas City, Missouri, on August 21, 2007.

Brian A. Yanez,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–16891 Filed 8–24–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 121

[Docket No. FAA–2002–14081, Notice No. 03–02]

RIN 2120–AH67

Transponder Continuous Operation

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM), withdrawal.

SUMMARY: The FAA is withdrawing the NPRM published on January 14, 2003, that proposed to require airplanes operated in domestic, flag, and supplemental operations to ensure immediate activation and continuous transmission of the designated hijack alert code to air traffic control (ATC) during a hijack situation. After September 11, 2001, the increased threat of hijacking and realization that a plane could be used as a weapon became the basis for the proposed rule. The intent was to provide the flight crew of commercial airplanes with the ability to initiate an immediate national security response in the event of a hijacking. The overwhelming majority of comments opposed the proposal for several reasons. Because of the reasons given, including completed security enhancements to strengthen flightdeck doors, we are withdrawing the proposal. Current regulations ensure an adequate level of aviation security.

FOR FURTHER INFORMATION CONTACT: Richard E. Jennings, Aircraft Certification Service, Aircraft Engineering Division, AIR–130, Federal Aviation Administration, 470 L'Enfant Plaza, Suite 4102, Washington, DC 20024; telephone (202) 385–6090; e-mail *Richard.Jennings@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

On January 14, 2003, the FAA published a Notice of Proposed Rulemaking (Notice No. 03–02, 68 FR 1942). The NPRM proposed to amend the instrument and equipment requirements in 14 CFR 121.345 for airplanes operated in domestic, flag, and supplemental operations. Under 121.345 currently, air carrier aircraft must be equipped with an air traffic control (ATC) transponder, which in normal operation provides radar beacon identity code and altitude for ATC use in controlling aircraft in en route and terminal areas of operation.

In response to the devastating events of September 11, 2001, the FAA