DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
14 CFR Part 39
RIN 2120-AA64
Airworthiness Directives; Diamond Aircraft Industries GmbH Airplanes
AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).
ACTION: Final Rule.
SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Diamond Aircraft Industries GmbH Model DA 42 NG and Model DA 42 M-NG 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 unsafe condition in the MCAI is insufficient clearance of the gust lock mounts on the pilot side rudder pedals. The FAA is issuing this AD to address the unsafe condition on these products.
DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
ADDRESSES:
For service information identified in this final rule, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet:
http://www.diamondaircraft.com. You may view this referenced service information at the FAA, Policy and Innovation Division, 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 http://www.regulations.gov by searching for Docket No. FAA-2019-0203.

**Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2019-0203; 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 address for Docket Operations is 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:** Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Standards Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Diamond Aircraft Industries GmbH Model DA 42 NG and Model DA 42 M-NG airplanes. The NPRM published in the *Federal Register* on April 2, 2019 (84 FR 12532). The NPRM proposed to require removing the left-hand pilot rudder pedal gust lock mounts and revising the airplane flight manual. The NPRM was based on MCAI originated by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community. The MCAI states:
During production check-out of two DA 42 NG aeroplanes, it was noticed that, with the adjustable rudder pedals in full forward position, the gust lock mounts slightly touched the canopy gas spring damper. The subsequent investigation found that this was due to an unfavourable combination of production tolerances on these two aeroplanes. [Diamond Aircraft Industries GmbH] DAI determined that other aeroplanes of the same build standard (configuration) may also be affected.

This condition, if not corrected, could lead to restricted rudder travel, possibly resulting in reduced control of the aeroplane.

Prompted by these findings, DAI published the [mandatory service bulletin] MSB, providing modification instructions to remove the gust lock mounts on the pilot (left-hand, LH) side rudder pedals to ensure sufficient clearance, regardless of production tolerances and rudder pedal position.

For the reason described above, this [EASA] AD requires implementation of a temporary revision (TR) to the applicable Airplane Flight Manual (AFM) and a modification, removing the pilot (LH) side rudder pedal gust lock mounts.


Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed.

Related Service Information under 1 CFR part 51

The FAA reviewed Diamond Aircraft Temporary Revision TR-MÄM 42-1097 Gustlock on Co-Pilot Side only, Doc. # 7.01.15-E, dated July 18, 2018 (TR-MAM 42-1097), which contains amended figures related to the gust lock belt. The FAA also reviewed Diamond Aircraft Industries GmbH Work Instruction WI-MSB 42NG-077,
dated August 20, 2018, which contains procedures for removing the pilot (LH) side rudder pedal gust lock mounts and specifies inserting a copy of TR-MAM 42-1097 into the AFM. 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.

Other Related Service Information

The FAA also reviewed Diamond Mandatory Service Bulletin MSB 42NG-077, dated August 20, 2018, which specifies complying with the most recent issue of Work Instruction WI-MSB 42NG-077.

Costs of Compliance

The FAA estimates that this AD will affect 53 products of U.S. registry. The FAA also estimates that it will take about 1 work-hour per product to comply with the removal of the pilot side rudder pedal gust lock mounts and to insert copy of TR-MAM 42-1097 into the AFM. The average labor rate is $85 per work-hour. Required parts will cost about $10 per product.

Based on these figures, the FAA estimates the cost of this AD on U.S. operators to be $5,035, or $95 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.
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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

**Regulatory Findings**

The FAA 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. Will not affect intrastate aviation in Alaska, 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.

**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 (AD):


   (a) Effective Date

   This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

   (b) Affected ADs

   None.

   (c) Applicability

   This AD applies to Diamond Aircraft Industries GmbH (Diamond) Model DA 42 NG and Model DA 42 M-NG airplanes, serial numbers 42.N202, 42.N203, 42.N205 through 42.N207, 42.N210 through 42.N214, 42.N229 through 42.N338, 42.N340, 42.MN055, 42.MN057, and 42.MN058, certificated in any category.

   (d) Subject

(e) **Reason**

This AD was prompted by 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 unsafe condition reported by the MCAI is insufficient clearance of the gust lock mounts on the pilot side rudder pedals. The FAA is issuing this AD to prevent restricted rudder travel, which could result in reduced control of the airplane.

(f) **Actions and Compliance**

Unless already done, do the following actions in paragraphs (f)(1) and (2) of this AD.

(1) Within the next 100 hours time-in-service after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD):

   (i) Remove the pilot (left-hand) side rudder pedal gust lock mounts in accordance with steps 1 through 5 of the Instructions in Diamond Aircraft Industries GmbH Work Instruction WI-MSB 42NG-077, dated August 20, 2018.

   (ii) Revise the airplane flight manual (AFM) by adding the figures on page 8-11a of Diamond Aircraft Temporary Revision TR-MÄM 42-1097 Gustlock on Co-Pilot Side only, Doc. # 7.01.15-E, dated July 18, 2018, into Chapter 8 of the AFM.

(2) As of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install on any airplane a pilot (left-hand) side rudder pedal gust lock mount.

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

The Manager, Small Airplane Standards Branch, 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 Standards Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone:
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.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2018-0214, dated October 4, 2018; and Diamond Mandatory Service Bulletin MSB 42NG-077, dated August 20, 2018, for related information. You may examine the MCAI on the Internet at https://www.regulations.gov/document?D=FAA-2019-0203-0002. Service information related to this final rule is available at the address in paragraph (i)(3) of this AD.

(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 this AD specifies otherwise.


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

(4) You may view this service information at the FAA, Policy and Innovation Division, 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:

Issued in Kansas City, Missouri, on July 19, 2019.

Melvin J. Johnson
Aircraft Certification Service
Deputy Director, Policy and Innovation Division, AIR-601
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