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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. 2002-NM-310-AD; Amendment 39-13834; AD 2004-22-06]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Dornier Model 328-100 and -300 Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Dornier Model 328-100 and -300 series airplanes, that requires inspection of the metal oxide varistor (MOV) modules and transient absorption zener (TAZ) diodes to determine if those parts are outside of tolerance limits, and replacement of MOV modules and TAZ diodes with new parts, if necessary. This action is necessary to prevent the failure of critical ice protection systems following a lightning strike, which could result in reduced controllability and degraded performance of the airplane in the event of an encounter with icing conditions. This action is intended to address the identified unsafe condition.

**DATES:** Effective December 2, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 2, 2004.

**ADDRESSES:** The service information referenced in this AD may be obtained from AvCraft Aerospace GmbH, P.O. Box 1103, D-82230 Wessling, Germany. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:** Thomas Groves, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1503; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain

Dornier Model 328-100 and -300 series airplanes was published in the Federal Register on February 26, 2004 (69 FR 8878). That action proposed to require inspection of the metal oxide varistor (MOV) modules and transient absorption zener (TAZ) diodes to determine if those parts are outside of tolerance limits, and replacement of MOV modules and TAZ diodes with new parts, if necessary.

## **Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

### **Request To Withdraw the Notice of Proposed Rulemaking (NPRM)**

One commenter believes that the AD is unwarranted. The commenter notes that Discussion section of the NPRM states, "Further investigation revealed that the airplane maintenance manual (AMM) does not include a check of this equipment following a lightning strike." The commenter points out that in Volume 1 of the AMM, Description and Operation, Section 05-51-02, "Lightning Strike," page 3, Sections C and D, dated September 3, 2003, it states, "After a lightning strike you must do the respective functional tests at all TAZ diodes and MOV modules or you can replace them directly without a functional test." From these comments, the FAA infers that the commenter is requesting that the NPRM be withdrawn.

We do not agree with the request to withdraw the NPRM. The commenter is correct in that the AMM has been updated to include instructions for checking the TAZ diodes and MOV modules following a lightning strike. However, as stated in the Discussion section of the NPRM, 37% of the inspected fleet has been found with TAZ diodes and MOV modules that are out of tolerance. The AD was written to determine if any pre-existing damage to the TAZ diodes or MOV modules exist. The out of tolerance condition, if not corrected, could result in the failure of critical ice protection system following a lightning strike, which could result in reduced controllability and degraded performance of the airplane in an event of an encounter with icing condition. We have determined that this AD action addresses the identified unsafe condition, and issuance of the final rule is necessary.

### **Request To Include Additional Costs**

The same commenter states that the Cost Impact section of the NPRM is understated. The commenter contends that it does not take into account the \$2,731 procurement cost of the high voltage test unit, part number (P/N) 771-9-001, necessary to test the TAZ diodes and MOV modules, and the yearly \$148.50 calibration cost. From this comment, we infer that the commenter is requesting a change to the Cost Impact section to account for the cost of special test equipment.

We agree that a change to the Cost Impact section is needed. We have confirmed that a special tool is necessary to perform the inspection required by this AD, and have revised the Cost Impact section of the final rule to include that cost.

## **Conclusion**

We have carefully reviewed the available data, including the comments that have been submitted, and determined that air safety and the public interest require adopting the AD with the change described previously. We have determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

## **Cost Impact**

The FAA estimates that 53 Model 328-100 series airplanes (4 operators) and 48 Model 328-300 series airplanes (8 operators) of U.S. registry will be affected by this AD.

For Model 328-100 series airplanes, it will take approximately 6 work hours per airplane to accomplish the required inspection, at an average labor rate of \$65 per work hour. The special tool necessary to accomplish the required inspection will cost approximately \$2,731 per operator. Based on these figures, the cost impact of the AD on U.S. operators of these airplanes is estimated to be \$31,594.

For Model 328-300 series airplanes, it will take approximately 3 work hours per airplane to accomplish the required inspection, at an average labor rate of \$65 per work hour. The special tool necessary to accomplish the required inspection will cost approximately \$2,731 per operator. Based on these figures, the cost impact of the AD on U.S. operators of these planes is estimated to be \$31,208.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

## **Regulatory Impact**

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

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The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2004-22-06 Fairchild Dornier GmbH (Formerly Dornier Luftfahrt GmbH):** Amendment 39-13834. Docket 2002-NM-310-AD.

**Applicability:** Model 328-100 series airplanes, serial numbers 3005 through 3119 inclusive; and Model 328-300 series airplanes, serial numbers 3105 through 3207 inclusive, except serial numbers 3199, 3200, 3203, and 3204; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent the failure of critical ice protection systems following a lightning strike, which could result in reduced controllability and degraded performance of the airplane in the event of an encounter with icing conditions, accomplish the following:

## **Inspection and Replacement**

(a) Within 90 days after the effective date of this AD, inspect transient absorption zener (TAZ) diodes and metal oxide varistor (MOV) modules to determine if those parts are outside of tolerance limits, in accordance with the Accomplishment Instructions of Dornier Service Bulletins SB-328-30-417, dated January 24, 2002 (for Model 328-100 series airplanes); or SB-328J-30-150, dated January 24, 2002 (for Model 328-300 series airplanes); as applicable. If any TAZ diode or MOV module is found to be outside of tolerance, before further flight, replace the faulty part with a new part in accordance with the Accomplishment Instructions of the applicable service bulletin.

## **Reporting Difference**

(b) Although the service bulletins referenced in this AD specify to submit certain information to the manufacturer, this AD does not include such a requirement.

## **Alternative Methods of Compliance**

(c) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-114, FAA, Transport Airplane Directorate, is authorized to approve alternative methods of compliance for this AD.

## **Incorporation by Reference**

(d) The actions shall be done in accordance with Dornier Service Bulletin SB-328-30-417, dated January 24, 2002; or Dornier Service Bulletin SB-328J-30-150, dated January 24, 2002; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from AvCraft

Aerospace GmbH, P.O. Box 1103, D-82230 Wessling, Germany. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Note 1:** The subject of this AD is addressed in German airworthiness directives 2002-262 and 2002-263, both dated September 19, 2002.

**Effective Date**

(e) This amendment becomes effective on December 2, 2004.

Issued in Renton, Washington, on October 18, 2004.

Kalene C. Yanamura,  
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.  
[FR Doc. 04-24029 Filed 10-27-04; 8:45 am]  
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