

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. 2000-NM-81-AD; Amendment 39-11686; AD 99-23-22 R2]

RIN 2120-AA64

Airworthiness Directives; Various Transport Category Airplanes Equipped with Mode "C" Transponder(s) with Single Gillham Code Altitude Input

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; rescission.

SUMMARY: This amendment rescinds Airworthiness Directive (AD) 99-23-22 R1, which is applicable to various transport category airplanes equipped with Mode "C" transponder(s) with single Gillham code altitude input. That AD requires repetitive tests to detect discrepancies of the Mode "C" transponder(s), air data computer, and certain wiring connections; and corrective actions, if necessary. The requirements of that AD were intended to prevent false advisories that direct the flightcrew to change course and either climb or descend, which could result in the flightcrew deviating the airplane from its assigned flight path, and a possible mid-air collision. Since the issuance of that AD, test data have been collected that demonstrate that the repetitive tests are unnecessary.

EFFECTIVE DATE: April 20, 2000.

FOR FURTHER INFORMATION CONTACT: Peter Skaves, Aerospace Engineer, Airplane and Flight Crew Interface Branch, ANM-111, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2795; fax (425) 227-1320.

SUPPLEMENTARY INFORMATION: On November 4, 1999, the Federal Aviation Administration (FAA) issued AD 99-23-22, amendment 39-11418 (64 FR 61493, November 12, 1999), as revised by AD 99-23-22 R1, amendment 39-11473 (64 FR 70181, December 16, 1999), applicable to various transport category airplanes equipped with Mode "C" transponder(s) with single Gillham code altitude input. That AD requires repetitive tests to detect discrepancies of the Mode "C" transponder(s), air data computer, and certain wiring connections; and corrective actions, if necessary. That action was prompted by reports that, during level flight, the Traffic Alert Collision Avoidance System (TCAS II) issued false advisories

that directed the flightcrew to change course and either climb or descend. Such false advisories, if not corrected, could result in the flightcrew deviating the airplane from its assigned flight path and a possible mid-air collision.

Actions Since Issuance of Previous AD

The compliance time for the initial test of the Mode "C" transponder(s) with single Gillham altitude code input, as required by AD 99-23-22 R1, has passed. Therefore, the FAA assumes that the test has been conducted at least once, and all applicable corrective actions have been accomplished, on all transport category airplanes affected by that AD. The following is a summary of the airplane inspections and test results:

Aircraft Test Results (AD 99-23-22 R1)

Aircraft test results reviewed = 1,142
Aircraft passing tests without corrective action required = 1,055
Aircraft failing tests with corrective action required = 87
Percent of aircraft that failed the AD test = 7.6%

Aircraft Wiring/Avionics Failures

Mode "C" transponder failures = 49
Air Data Computer (ADC) failures = 14
Encoding altimeter failures = 3
Gillham code wiring failures = 1
Miscellaneous wiring failures = 8
Failures sources under review = 12

The results of the transponder tests required by AD 99-23-22 R1 revealed that numerous Mode "C" transponders failed the test, and many of the Mode "C" test failures have been determined to be caused by a particular transponder type. All other test failures reported by operators appear to be random and isolated.

The FAA concludes that continued repetitive tests on the applicable airplane models listed in AD 99-23-22 R1 are unnecessary since the corrective actions have been accomplished on all transport category airplanes identified in that AD.

In addition, the FAA has determined that the repetitive performance of the tests required by AD 99-23-22 R1 may result in increased or accelerated component wear, which could contribute to reports of incorrect airplane altitude.

Future Rulemaking

Over 50 percent of the airplane test failures have been reported by operators to be caused by Mode "C" transponders. The FAA is conducting further reviews to determine whether a systematic root cause failure of that Mode "C" transponder exists. Based on the results of these reviews, the FAA may consider

further rulemaking to address potential problems concerning the Mode "C" transponder.

FAA's Determination

Because the results of the tests required by AD 99-23-22 R1 have identified and corrected the causes of the identified unsafe condition, and because repetitive performance of the test may increase or accelerate component wear and contribute to reports of incorrect airplane altitude, the FAA has determined that it is necessary to rescind AD 99-23-22 R1 to prevent operators from performing unnecessary and potentially harmful repetitive tests.

Since this action rescinds a requirement to perform unnecessary actions, it has no adverse economic impact and imposes no additional burden on any person. Therefore, notice and public procedures hereon are unnecessary, and the rescission may be made effective upon publication in the **Federal Register**.

The Rescission

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 an airworthiness directive removing amendment 39-11473.

99-23-22 R2 Transport Category

Airplanes: Amendment 39-11686.

Docket No. 2000-NM-81-AD. Rescinds AD 99-23-22 R1, Amendment 39-11473.

Applicability: Transport category airplanes, as listed below, certificated in any category, equipped with any Mode "C" transponder with single Gillham code altitude input, including, but not limited to, the transponder part numbers listed below. Whether a Mode "C" transponder has a single Gillham code altitude input may be determined by reviewing the transponder installation instructions.

Airplane Models

Airbus Industrie
A300
A310
British Aerospace
BAe Avro 146-RJ
BAe ATP
Fokker
F28 Mark 0070
F28 Mark 0100

F28 Mark 1000-4000
 Lockheed
 L-1011 TriStar
 L-188 Electra
 CASA
 CN-235
 Dassault Aviation
 Mystere Falcon 50
 Mystere Falcon 900
 Mystere Falcon 200
 Fan Jet Falcon Series G
 Boeing (MDC)
 DC-10-30
 DC-10-40
 DC-9
 DC-9-81
 DC-9-82
 DC-9-83
 DC-9-87
 Boeing 707
 Boeing 727
 Boeing 737
 Boeing 747
 Bombardier
 CL-215-1A10
 CL-215-6B11
 CL-600-1A11
 CL-600-2A12
 CL-600-2B16
 Gulfstream
 G1159 (G-II)
 G-1159A (G-III)
 G-IV
 Mode "C" Transponder Part Numbers
 Rockwell Collins
 622-2224-001
 622-2224-003
 522-2703-001
 522-2703-011
 787-6211-001
 787-6211-002
 Bendix
 066-1056-00
 066-1056-01
 066-1123-00
 2041599-6508
 Wilcox
 97637-201
 97637-301
 IFF
 APX-100
 APX-101
 This rescission is effective April 20, 2000.

Issued in Renton, Washington, on April 7, 2000.

Donald L. Riggins,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
 [FR Doc. 00-9247 Filed 4-19-00; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-NM-97-AD; Amendment 39-11689; AD 2000-08-03]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-11 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain McDonnell Douglas Model MD-11 series airplanes, that currently requires the deactivation of the forward and center cargo control units (CCU). That amendment was prompted by a report of failure of a CCU, which produced overheating of the electrical pins inside the CCU; the subsequent release of hot gases and flames ignited an adjacent insulation blanket. This amendment expands the applicability of the existing AD to include additional airplanes. The actions specified in this AD are intended to prevent overheating of the electrical pins inside the CCU's and subsequent release of hot gases and flames, which could result in smoke and fire in the cargo compartment.

DATES: Effective May 5, 2000. Comments for inclusion in the Rules Docket must be received on or before June 19, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-97-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Information pertaining to this amendment may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT: Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: On February 28, 2000, the FAA issued AD 2000-05-01, amendment 39-11610 (65 FR 11459, March 3, 2000), applicable to certain McDonnell Douglas Model MD-11 series airplanes, to require the deactivation of the forward and center cargo control units (CCU). That action was prompted by a report of failure of a CCU, which produced overheating of the electrical pins inside the CCU; the subsequent release of hot gases and flames ignited an adjacent insulation blanket. The actions required by that AD are intended to prevent such conditions, which could result in smoke and fire in the cargo compartment.

The incident that prompted AD 2000-05-01 is not considered to be related to an accident that occurred off the coast of Nova Scotia involving a McDonnell Douglas Model MD-11 series airplane. The cause of that accident is still under investigation.

Other Related Rulemaking

The FAA, in conjunction with Boeing and operators of Model MD-11 series airplanes, is continuing to review all aspects of the service history of those airplanes to identify potential unsafe conditions and to take appropriate corrective actions. This AD is one of a series of actions identified during that process. The process is continuing and the FAA may consider additional rulemaking actions as further results of the review become available.

Actions Since Issuance of Previous Rule

The applicability statement of AD 2000-05-01 lists the serial numbers of the affected airplanes, which were provided by the airplane manufacturer. Since the issuance of that AD, the airplane manufacturer has informed the FAA that it inadvertently provided two incorrect airplane serial numbers (i.e., 48679 and 58563); those serial numbers do not exist. The correct serial numbers of those two airplanes are 48769 and 48563. The FAA has determined that affected airplanes having serial numbers 48769 and 48563 also are subject to the identified unsafe condition.

Explanation of Requirements of Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of this same type design, this AD supersedes AD 2000-05-01 to continue to require the deactivation of the forward and center CCU's. This AD also expands the applicability of the existing AD to include additional airplanes.