



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9392; Product Identifier 2016-NM-003-AD; Amendment 39-19499; AD 2018-23-12]

RIN 2120-AA64

Airworthiness Directives; Zodiac Aero Evacuation Systems (also known as Air Cruisers Company)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Zodiac Aero Evacuation Systems (also known as Air Cruisers Company) fusible plugs installed on emergency evacuation equipment for various transport category airplanes. This AD was prompted by reports indicating that affected fusible plugs activated (vented gas) below the rated temperature. This AD requires an inspection of the fusible plugs to determine the part number and lot number, and replacement of all affected fusible plugs. We are 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 Air Cruisers, 1747 State Route 34, Wall Township, NJ 07727-3935; phone 732-681-3527; email technicalpublications@zodiacaerospace.com. You may view this service information at

the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9392.

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-2016-9392; 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 (phone: 800-647-5527) 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: Darren Gassetto, Aerospace Engineer, Mechanical Systems and Admin Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Zodiac Aero Evacuation Systems (also known as Air Cruisers Company) fusible plugs installed on emergency evacuation equipment for various transport category airplanes. The NPRM published in the Federal Register on November 18, 2016 (81 FR 81709). The NPRM was prompted by reports indicating that affected fusible plugs activated (vented gas) below the rated temperature. The NPRM

proposed to require an inspection of the fusible plugs to determine the part number and lot number, and replacement of all affected fusible plugs.

We subsequently issued a supplemental NPRM (SNPRM) that was published in the Federal Register on January 24, 2018 (83 FR 3283). The SNPRM proposed to extend the compliance time, clarify the applicability, and clarify certain requirements.

We are issuing this AD to address fusible plugs that might activate below the rated temperature and render the evacuation system unusable.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the SNPRM and the FAA's response to each comment.

Request to Extend Compliance Time

Airlines for America (A4A), on behalf of its members, requested that we extend the compliance time specified in paragraph (h) of the proposed AD (in the SNPRM). A4A stated that the extended compliance time of 42 months after the effective date (in paragraph (g) of the proposed AD (in the SNPRM)) had an unintended consequence in the re-worded compliance paragraph (h) of the proposed AD (in the SNPRM). A4A noted that while the allowance for maintenance records inspection was added, the words “[b]efore further flight” remained. A4A concluded that the current version means that either a planeside finding or a maintenance records discovery will each require action before further flight. A4A stated that while a finding by direct inspection will happen only in a shop and not affect operation of any aircraft, the accommodation for records review could immediately ground an in-service aircraft. A4A requested that we allow 42 months for the replacement if a records review was done.

We agree to revise the compliance time in paragraph (h) of this AD because we have determined that a compliance time of 42 months to replace the affected part

addresses the unsafe condition and provides an acceptable level of safety. We have revised paragraph (h) of the AD to specify a 42-month compliance time for the replacement.

Request to Specify Serial Numbers

All Nippon Airways (ANA) requested that we revise paragraph (c) of the proposed AD (in the SNPRM) to refer to service information that specifies the serial numbers and not only the part numbers of the affected emergency equipment. ANA stated that identifying affected [parts] by only the part number means that even after expiration of the compliance time specified in the proposed AD, the inspection must be continued every time the affected emergency equipment is purchased. ANA stated that the serial number of the affected emergency equipment should be specified in the service information listed in paragraph (c) of the proposed AD (in the SNPRM) in order to prevent endless inspections.

We do not agree because specific serial numbers for the affected emergency equipment have not been identified. In addition, since the fusible plugs are rotatable we cannot limit the applicability to only the known emergency equipment on which the fusible plugs were initially installed. Therefore, in order to address the identified unsafe condition, all fusible plugs installed on emergency evacuation equipment identified in the service information specified in paragraph (c) of this AD must be inspected as specified in paragraph (g) of this AD. When installing new equipment on an airplane, operators must ensure the newly installed part is not one of the affected parts by complying with the parts installation prohibition specified in paragraph (i) of this AD. We have not changed this AD in this regard.

Request to Refer to Service Information

Southwest Airlines (SWA) and A4A, on behalf of its members, requested that we refer to service information for accomplishing the actions specified in paragraph (g) of

the proposed AD (in the SNPRM). SWA stated that the Air Cruisers service bulletins listed in paragraphs (c)(1) through (c)(16) of the proposed AD (in the SNPRM) have steps to inspect for the affected fusible plugs and to remove fusible plugs that are stamped with Lot PA-21 or PA-22. SWA noted that the service bulletins have been incorporated into the various Air Cruisers component maintenance manuals (CMMs). A4A stated that the service bulletins and CMMs specify an inspection for the suspect fusible plug lot numbers and replacement if found.

A4A and SWA also stated that maintenance records would not indicate the level of detail of the fusible plug part numbers and lot numbers installed. SWA stated that the revision of the CMM used to make the components serviceable is noted on FAA Form 8130-3. A4A also stated that access to the fusible plug part number and lot number is not achievable planeside, and noted that the equipment manufacturer recommends the system to be unpacked and inspected in the slide shop. SWA and A4A requested that paragraph (g) of the proposed AD (in the SNPRM) be revised to specify accomplishing the inspection in accordance with the applicable service information specified in paragraphs (c)(1) through (c)(16) of the proposed AD (in the SNPRM) and/or the applicable component maintenance manuals.

We do not agree with revising paragraph (g) of this AD to mandate service information because this AD does not require operators to accomplish the inspection using a specific method. However, we do agree that operators should be aware of the service information that can be used to do the inspection specified in paragraph (g) of this AD. Therefore, we have added Note 1 to paragraph (g) of this AD to specify service bulletins and CMMs that provide guidance for performing the inspection. We have redesignated subsequent notes in this AD accordingly.

We also acknowledge the commenters' statement that the records review might not be conclusive. As stated in paragraph (g) of this AD, the records review is allowed

only if operators can conclusively determine the part number and lot number. For operators that do not have records that can conclusively determine the part number and lot number, the inspection must be done.

Request to Remove Paragraph (h) of the Proposed AD (in the SNPRM)

SWA requested that we remove paragraph (h) of the proposed AD (in the SNPRM). SWA stated that paragraph (h) of the proposed AD (in the SNPRM) would require immediate removal of the emergency equipment if an inspection or a records review determines an affected part is installed. SWA suggested that paragraph (h) of the proposed AD (in the SNPRM) be deleted because it is unnecessary. SWA stated the emergency equipment must be removed from the aircraft in order to inspect for the affected fusible plug. SWA noted the component maintenance documents do not provide the level of detail of the fusible plug part numbers and lot numbers installed.

We do not agree with removing paragraph (h) of this AD because in order to address the unsafe condition the affected fusible plug must not only be removed but must also be replaced as required by paragraph (h) of this AD. We have not changed this AD in this regard. However, as stated previously, we have revised the compliance time in paragraph (h) of this AD to specify replacing within 42 months instead of requiring immediate action.

Request for Credit for Actions Done Using Certain Service Information

SWA requested that we give credit for inspections of the affected fusible plugs previously done per Air Cruisers service bulletins and/or CMMs incorporating the requirements of the Air Cruisers service bulletins.

We agree to clarify. We have not mandated specific service information for accomplishing the actions specified in paragraphs (g) and (h) of this AD; therefore, it is not necessary to give credit for using specific service information. For operators that have already accomplished the actions required by paragraphs (g) and (h) of this AD, credit is

given as specified in paragraph (f) of this AD, which states to accomplish the required actions within the compliance times specified, “unless already done.” Therefore, if operators have accomplished the actions required for compliance with paragraphs (g) and (h) of this AD before the effective date of this AD, no further action is necessary.

Request to Revise Parts Installation Prohibition

A4A, on behalf of its members, requested that we revise paragraph (i) of the proposed AD (in the SNPRM) to specify that no person may install on any airplane any slide, slide/raft, or off-wing escape system unless the inspection of the fusible plug has been done per the applicable service information specified in paragraphs (c)(1) through (c)(16) of the proposed AD (in the SNPRM) and/or the applicable CMM listed in Air Cruisers Service Information Letter (SIL) 25-246, Rev. No. 2, dated January 24, 2017. A4A stated that paragraph (i) of the proposed AD (in the SNPRM) does not sufficiently close the door on direct inspection of the plug, which can only be accomplished by unpacking slides and complete disassembly. A4A stated that only the inspection of records (including service bulletin accomplishment information directly stamped on the slide) can reasonably accomplish the intention of the proposed AD in a practical manner.

We do not agree because we have not mandated the service information specified by the commenter. In order to comply with paragraph (i) of this AD, operators must prevent the installation of an affected part on an airplane. Paragraph (i) of this AD does not mandate a specific method for operators to follow to ensure the affected part is not installed. We have not changed this AD in this regard.

Request to Revise Cost Estimate

A4A, on behalf of its members, requested that we revise the cost estimate. A4A stated that the NPRM assumes one hour of labor per aircraft. A4A noted that because the actions need to be done at an appropriate facility (off wing and often not the operator’s own shop), the cost should be per system, and include all facets from uninstalling through

reinstallation. A4A stated the operator's actions will consume closer to 4 hours per slide (at \$85/hour), with the addition of \$500 each way shipping, and the vendor cost (Zodiac's typical billing is \$2,900 per slide).

We agree with revising the cost estimate because operators that cannot do a records review will need to remove the affected emergency equipment to accomplish the inspection. We disagree with including the shipping and vendor costs because not all operators will need to ship the equipment in order to do the inspection or records review. We have revised the Costs of Compliance section in this final rule to specify up to 4 work-hours for the inspection.

Clarification of Replacement Part

In paragraph (h) of the proposed AD (in the SNPRM), we specified to replace the fusible plug with a new part that does not have P/N B13984-3, stamped with Lot PA-21 or PA-22. However, we have determined that it is not necessary for the replacement part to be a new part. Therefore, we have revised paragraph (h) of this AD to specify to replace the fusible plug with a serviceable fusible plug P/N B13984-3 that is not stamped with Lot PA-21 or PA-22.

Additional Affected Parts—Other Related Service Information

We have reviewed Air Cruisers Service Information Letter (SIL) 25-246, Rev. No. 2, dated January 24, 2017, which indicates additional fusible plugs might be affected by the identified unsafe condition. We have determined that to delay this action in order to allow the public to comment on the merits of inspecting the additional fusible plugs would be inappropriate, since we have determined that an unsafe condition exists and that inspections must be conducted to ensure continued safety. We are considering additional rulemaking to address additional fusible plugs.

Clarification of Manufacturer's Name

In the Summary of the SNPRM, we noted that Zodiac Aero Evacuation Systems was formerly known as Air Cruisers. However, Zodiac Aero Evacuation Systems is also known as Air Cruisers Company. For clarity, we have referred to the manufacturer as Zodiac Aero Evacuation Systems (also known as Air Cruisers Company) throughout this final rule.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the SNPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the SNPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

We reviewed the following Air Cruisers service information. The service information identifies the affected fusible plugs. In addition, it describes procedures for inspecting and replacing affected fusible plugs. These documents are distinct since they apply to different airplane models or configurations.

- Air Cruisers Service Bulletin 737 103-25-50, dated August 27, 2010.
- Air Cruisers Service Bulletin 757 105-25-80, dated August 27, 2010.
- Air Cruisers Service Bulletin 757 105-25-81, dated August 27, 2010.

- Air Cruisers Service Bulletin 767 106-25-10, Rev. No. 1, dated October 15, 2010.

- Air Cruisers Service Bulletin 777 107-25-29, Rev. No. 1, dated July 8, 2011.
- Air Cruisers Service Bulletin A300/A310 001-25-19, dated August 27, 2010.
- Air Cruisers Service Bulletin A300/A310 003-25-33, dated August 27, 2010.
- Air Cruisers Service Bulletin A310 002-25-08, dated August 27, 2010.
- Air Cruisers Service Bulletin A320 004-25-87, Rev. No. 2, dated January 7,

2011.

- Air Cruisers Service Bulletin A321 005-25-21, dated August 27, 2010.
- Air Cruisers Service Bulletin BAe 146 201-25-23, dated December 10, 2010.
- Air Cruisers Service Bulletin F28 352-25-02, dated December 10, 2010.
- Air Cruisers Service Bulletin F100 351-25-07, dated December 10, 2010.
- Air Cruisers Service Bulletin Liferaft 35-25-79, dated August 27, 2010.
- Air Cruisers Service Bulletin MD11 305-25-35, dated August 27, 2010.
- Air Cruisers Service Bulletin MD80/90/717 304-25-45, dated August 27, 2010.

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.

Costs of Compliance

We estimate that this AD affects 3,384 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Determination of part and lot number	Up to 4 work-hours X \$85 per hour = Up to \$340	\$0	Up to \$340	Up to \$1,150,560

We estimate the following costs per slide to do any necessary replacement of the fusible plug that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need these replacements:

On-condition Cost

Action	Labor cost	Parts cost	Cost per product
Replacement	1 work-hour X \$85 per hour = \$85	Not available	\$85

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

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.

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 transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

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 that 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),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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):

2018-23-12 Zodiac Aero Evacuation Systems (also known as Air Cruisers Company): Amendment 39-19499; Docket No. FAA-2016-9392; Product Identifier 2016-NM-003-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 Zodiac Aero Evacuation Systems (also known as Air Cruisers Company) fusible plugs installed on emergency evacuation equipment identified in the service information specified in paragraphs (c)(1) through (c)(16) of this AD. These affected fusible plugs might be installed on the emergency evacuation equipment of the following manufacturers' airplanes: Airbus, The Boeing Company, BAE Systems (Operations) Limited, and Fokker Services B.V.

- (1) Air Cruisers Service Bulletin 737 103-25-50, dated August 27, 2010.
- (2) Air Cruisers Service Bulletin 757 105-25-80, dated August 27, 2010.
- (3) Air Cruisers Service Bulletin 757 105-25-81, dated August 27, 2010.
- (4) Air Cruisers Service Bulletin 767 106-25-10, Rev. No. 1, dated October 15, 2010.
- (5) Air Cruisers Service Bulletin 777 107-25-29, Rev. No. 1, dated July 8, 2011.
- (6) Air Cruisers Service Bulletin A300/A310 001-25-19, dated August 27, 2010.
- (7) Air Cruisers Service Bulletin A300/A310 003-25-33, dated August 27, 2010.
- (8) Air Cruisers Service Bulletin A310 002-25-08, dated August 27, 2010.
- (9) Air Cruisers Service Bulletin A320 004-25-87, Rev. No. 2, dated January 7, 2011.

- (10) Air Cruisers Service Bulletin A321 005-25-21, dated August 27, 2010.
- (11) Air Cruisers Service Bulletin BAe 146 201-25-23, dated December 10, 2010.
- (12) Air Cruisers Service Bulletin F28 352-25-02, dated December 10, 2010.
- (13) Air Cruisers Service Bulletin F100 351-25-07, dated December 10, 2010.
- (14) Air Cruisers Service Bulletin Liferaft 35-25-79, dated August 27, 2010.
- (15) Air Cruisers Service Bulletin MD11 305-25-35, dated August 27, 2010.
- (16) Air Cruisers Service Bulletin MD80/90/717 304-25-45, dated August 27,

2010.

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

(e) Unsafe Condition

This AD was prompted by reports indicating that affected fusible plugs activated (vented gas) below the rated temperature. We are issuing this AD to address fusible plugs that might activate below the rated temperature and render the evacuation system unusable.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Fusible Plug Identification

Within 42 months after the effective date of this AD, do an inspection to determine if any fusible plug has part number (P/N) B13984-3, stamped with Lot PA-21 or PA-22. A review of the airplane maintenance records is acceptable to make this determination if it can be conclusively determined from that review that a part not having P/N B13984-3, stamped with Lot PA-21 or PA-22, has been installed.

Note 1 to paragraph (g) of this AD: Guidance for performing the inspection specified in paragraph (g) of this AD can be found in applicable service information specified in paragraphs (c)(1) through (c)(16) of this AD and the applicable component

maintenance manuals (CMMs) that have incorporated the appropriate Air Cruisers service information.

(h) Replacement of Affected Fusible Plug

If, during the inspection or records review required by paragraph (g) of this AD, it is determined that any fusible plug has part number (P/N) B13984-3, stamped with Lot PA-21 or PA-22: Within 42 months after the effective date of this AD, replace that fusible plug with a serviceable fusible plug P/N B13984-3 that is not stamped with Lot PA-21 or PA-22.

Note 2 to paragraph (h) of this AD: Guidance can be found in the applicable CMM for the replacement. In addition, Air Cruisers Service Information Letter (SIL) 25-246, Rev. No. 1, dated February 21, 2014, provides information regarding affected fusible plugs and guidance on the replacement.

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install on any airplane any fusible plug having P/N B13984-3, stamped with Lot PA-21 or PA-22.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7300; fax: 516-794-5531.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Admin Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (l)(4) of this AD.

(l) 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 determine parts that are affected by this AD, unless the AD specifies otherwise.

(i) Air Cruisers Service Bulletin 737 103-25-50, dated August 27, 2010.

(ii) Air Cruisers Service Bulletin 757 105-25-80, dated August 27, 2010.

(iii) Air Cruisers Service Bulletin 757 105-25-81, dated August 27, 2010.

(iv) Air Cruisers Service Bulletin 767 106-25-10, Rev. No. 1, dated October 15, 2010.

(v) Air Cruisers Service Bulletin 777 107-25-29, Rev. No. 1, dated July 8, 2011.

(vi) Air Cruisers Service Bulletin A300/A310 001-25-19, dated August 27, 2010.

(vii) Air Cruisers Service Bulletin A300/A310 003-25-33, dated August 27, 2010.

(viii) Air Cruisers Service Bulletin A310 002-25-08, dated August 27, 2010.

(ix) Air Cruisers Service Bulletin A320 004-25-87, Rev. No. 2, dated January 7, 2011.

(x) Air Cruisers Service Bulletin A321 005-25-21, dated August 27, 2010.

(xi) Air Cruisers Service Bulletin BAe 146 201-25-23, dated December 10, 2010.

- (xii) Air Cruisers Service Bulletin F28 352-25-02, dated December 10, 2010.
- (xiii) Air Cruisers Service Bulletin F100 351-25-07, dated December 10, 2010.
- (xiv) Air Cruisers Service Bulletin Liferaft 35-25-79, dated August 27, 2010.
- (xv) Air Cruisers Service Bulletin MD11 305-25-35, dated August 27, 2010.
- (xvi) Air Cruisers Service Bulletin MD80/90/717 304-25-45, dated August 27, 2010.

(3) For service information identified in this AD, contact Air Cruisers, 1747 State Route 34, Wall Township, NJ 07727-3935; phone 732-681-3527; email technicalpublications@zodiacaerospace.com.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on November 8, 2018.

Chris Spangenberg,

Acting Director,

System Oversight Division,

Aircraft Certification Service.

[FR Doc. 2018-25003 Filed: 11/21/2018 8:45 am; Publication Date: 11/23/2018]