



[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2017-0505; Product Identifier 2017-NE-15-AD]

RIN 2120-AA64

#### Airworthiness Directives; Zodiac Aerotechnics, Oxygen Mask Regulators

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Zodiac Aerotechnics oxygen mask regulators. This proposed AD was prompted by reports that certain silicon harness inflation hoses, installed on certain flight crew quick donning mask harnesses, have shown an unusually high premature rupture rate. This proposed AD would require inspection and replacement of oxygen mask regulator harness inflation hoses. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Zodiac Aerotechnics, 61 rue Pierre Curie BP 1, 78373 Plaisir, CEDEX, France; phone: +33 1 6486 6964; email: Christophe.beset@zodiacaerospace.com or Yann.laine@zodiacaerospace.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, Policy and Innovation Division, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

### **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-2017-0505; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Erin Hulverson, Aerospace Engineer, FAA, Boston ACO Branch, Compliance and Airworthiness Division, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7655; fax: 781-238-7199; email: erin.hulverson@faa.gov.

### **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-2017-0505; Product Identifier 2017-NE-15-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://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning 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 EASA AD 2014-0142, Revision 1, dated June 11, 2014 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Recent reported occurrences have shown that for harness hoses P/N 445952, installed on certain flight crew quick donning mask harnesses (also known as ‘comfort’ harness) having P/N MXH21-1, suspected silicon batches may have been used during manufacture, which have shown an unusually high premature rupture rate. The affected P/N MXH21-1 inflatable harness assembly consists of two main parts that can be disassembled; the harness itself and the harness inflation hose, P/N 445952.

This condition, if not detected and corrected, could lead, in case of a sudden depressurization event, to a harness rupture, thereby providing inadequate protection against hypoxia of the affected flight crew member, possibly resulting in unconsciousness and consequent reduced control of the aeroplane.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0505.

### **Related Service Information under 1 CFR Part 51**

Zodiac Aerotechnics has issued Service Bulletin (SB) No. MC10-35-274, Revision 2, dated June 25, 2014. The SB describes procedures for inspecting and

replacing, if necessary, oxygen mask regulator inflatable harnesses. 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.

**FAA’s Determination and Requirements of This Proposed AD**

This product has been approved by EASA, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has 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 provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require inspection and preventive replacement, if necessary, of potentially defective oxygen mask regulator inflatable harnesses.

**Costs of Compliance**

We estimate that this proposed AD affects an unknown number of oxygen mask regulators installed on, but not limited to, various aircraft of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Date of manufacturing code review	0.1 work-hours X \$85 per hour = \$8.50	\$0	\$8.50
Hose replacement	0.3 work-hours X \$85 per hour = \$25.50	\$1,465.00	\$1,490.50

## **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 engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

## **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),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, 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.

#### **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 airworthiness directive (AD):

**Zodiac Aerotechnics (formerly Intertechnique):** Docket No. FAA-2017-0505; Product Identifier 2017-NE-15-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Zodiac Aerotechnics MC10 series crew oxygen mask regulators fitted with an inflatable harness assembly, part number (P/N) MXH20-1 or MXH21-1, fitted with harness inflation hose, P/N 445186 or P/N 445952.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 3510, Crew Oxygen System.

**(e) Reason**

This AD was prompted by reports that certain silicon harness inflation hoses, installed on certain flight crew quick donning mask harnesses (also known as ‘comfort’ harness), have shown an unusually high premature rupture rate. We are issuing this AD to prevent a harness rupture during a sudden depressurization event that could result in hypoxia and subsequent unconsciousness of the affected flight crew member, and consequent reduced control of the aircraft.

**(f) Compliance**

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

**(g) Required Actions**

(1) Within 24 months after the effective date of this AD, determine the date of manufacturing (DMF) code of each inflatable harness assembly, P/N MXH20-1 and MXH21-1, fitted to a flight crew oxygen mask regulator, having a P/N listed in Section 1.A.(1) of Zodiac Aerotechnics Service Bulletin (SB) MC10-35-274, Revision 2, dated June 25, 2014. A review of airplane delivery or maintenance records is acceptable to

make the determination as specified in this paragraph, provided those records can be relied upon for that purpose, and the DMF of the inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, as applicable, can be conclusively identified from that review.

(2) If during the review required by paragraph (g)(1) of this AD, the DMF code of the inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, is found to be between 0850-S and 1051-S (inclusive): Within 24 months after the effective date of this AD, replace the harness inflation hose, P/N 445186 or P/N 445952, as applicable, with a part eligible for installation, or remove the inflatable harness assembly from the mask regulator and replace it with an inflatable harness assembly eligible for installation.

(3) An oxygen mask regulator equipped with an inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, having a DMF code of November 2008 (0845-S or 08/45-S) or earlier, and those with a DMF code of January 2011 (1101-S or 11/01-S) or later, is excluded from the review and replacement requirements of this AD, provided it can be demonstrated that neither the inflatable harness assembly, nor the harness inflation hose, P/N 445186 or P/N 445952, as applicable, was replaced on that mask. A review of airplane delivery or maintenance records is acceptable to make the determination, provided those records can be relied upon for that purpose.

**(h) Installation Prohibition**

(1) After the effective date of this AD, do not install on any airplane a flight crew oxygen mask regulator with a P/N listed in Planning Information, Section 1.A.(1) of Zodiac Aerotechnics SB MC10-35-274, Revision 2, dated June 25, 2014.

(2) After the effective date of this AD, an inflatable harness assembly, with a P/N identified in Section 1.A.(1) of Zodiac Aerotechnics SB MC10-35-274, is eligible for installation, provided it has been determined that a P/N MXH20-1 or P/N MXH21-1 inflatable harness installed on that flight crew oxygen mask regulator has been inspected,

and re-marked with an “I” as required by Material Information, Section 2.E. of Zodiac Aerotechnics SB MC10-35-274, Revision 2, dated June 25, 2014.

(3) After the effective date of this AD, an inflatable harness assembly, with a P/N identified in Section 1.A.(1) of Zodiac Aerotechnics SB MC10-35-274, is eligible for installation, provided it has been determined that an inflatable harness, P/N MXH21-31, is installed, or that the inflatable harness, P/N MXH20-1 or P/N MXH21-1, installed on that flight crew oxygen mask regulator has been corrected, and re-marked with a “W” as required by Accomplishment Instructions, Section 3.C. of Zodiac Aerotechnics SB MC10-35-274, Revision 2, dated June 25, 2014.

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

(1) The Manager, FAA, Boston ACO Branch, Compliance and Airworthiness Division, 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 manager of the ACO Branch, send it to the attention of the person identified in paragraph (j)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(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.

**(j) Related Information**

(1) For more information about this AD, contact Erin Hulverson, Aerospace Engineer, FAA, Boston ACO Branch, Compliance and Airworthiness Division, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7655; fax: 781-238-7199; email: erin.hulverson@faa.gov.

(2) Refer to MCAI EASA AD 2014-0142, Revision 1, dated June 11, 2014, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2017-0505.

(3) Zodiac Aerotechnics SB MC10-35-274, Revision 2, dated June 25, 2014, can be obtained from Zodiac Aerotechnics, using the contact information in paragraph (j)(4) of this proposed AD.

(4) For service information identified in this proposed AD, contact Zodiac Aerotechnics, 61 rue Pierre Curie BP 1, 78373 Plaisir, CEDEX, France; phone: +33 1 6486 6964; email: [Christophe.besset@zodiacaerospace.com](mailto:Christophe.besset@zodiacaerospace.com) or [Yann.laine@zodiacaerospace.com](mailto:Yann.laine@zodiacaerospace.com).

(5) You may view this service information at the FAA, Engine and Propeller Standards Branch, Policy and Innovation Division, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on September 11, 2017.

Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.

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