[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0456; Directorate Identifier 2013-CE-011-AD; Amendment 39-17462; AD 2013-11-02]

RIN 2120-AA64

Airworthiness Directives; Aircraft Industries a.s. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments

SUMMARY: We are adopting a new airworthiness directive (AD) for Aircraft Industries a.s. Model L-420 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as in-flight engine flame out occurred at take-off with water injection after reduction of engine power. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD 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.
- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2013-0097, dated April 24, 2013 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

> Currently, the automatic switching off of the water injection system as installed on L-410 and L-420 aeroplanes stops the water injection into the engines during engine power reduction when throttle control levers pass the position corresponding to 88-92 % of gas generator speed.
>
> During a recent event, in-flight engine flame out occurred at take-off with water injection after reduction of engine power.
>
> This condition, if not corrected, could lead to further events of uncommanded in-flight engine shut-down or power loss, possibly resulting in forced landing, with consequent damage to the aeroplane and injury to occupants.
>
> Prompted by this occurrence, a procedure has been developed, instructing the flight crew to switch off the water injection system, prior to engine power reduction, to prevent any possible engine flame out.
>
> For the reasons described above, this AD requires an amendment of the Aircraft Flight Manual (AFM) by implementation of a procedure to manually switch off the water injection system, prior to any engine power reduction.

FAA's Determination and Requirements of the AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by the State of Design Authority and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because there are no airplanes currently on the U.S. registry and thus, does not have any impact upon the public. Therefore, we find that notice and

opportunity for prior public comment are unnecessary and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-0456; Directorate Identifier 2013-CE-011-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this 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 we receive about this AD.

Costs of Compliance

We estimate that this AD will affect 0 products of U.S. registry. We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour.

Based on these figures, we estimate the cost of the AD on U.S. operators to be $0, or $0 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.

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.

Regulatory Findings

We 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 that this AD:

(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, 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 AD:

2013-11-02 **Aircraft Industries a.s.:** Amendment 39-17462; Docket No. FAA-2013-0456; Directorate Identifier 2013-CE-011-AD.

(a) **Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) **Affected ADs**

None.

(c) **Applicability**

This AD applies to Aircraft Industries a.s. Model L-420 airplanes, all serial numbers, certificated in any category.

(d) **Subject**

Air Transport Association of America (ATA) Code 82: Water Injection.

(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 MCAI describes the unsafe condition as in-flight engine flame out occurred at take-off with water injection after reduction of engine power. We are issuing this AD to correct this condition, which, if not corrected, could lead to further events of uncommanded in-flight engine shut-down or power loss, possibly resulting in forced landing, with consequent damage to the airplane and injury to occupants.

(f) **Actions and Compliance**

Unless already done, within 30 days after [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), amend the applicable airplane flight manual (AFM) by inserting a copy of Appendix 1 of this AD, opposite the appropriate AFM page on which the water injection procedure is described.

(g) **Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, 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: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov. 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.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) **Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2013-0097, dated April 24, 2013, for related information.

Appendix 1 to AD 2013-11-02

AIRPLANE FLIGHT MANUAL (AFM)

PROCEDURE TO CONTROL WATER INJECTION SYSTEM

for

Aircraft Industries a.s. Model L-420 Airplanes

Appendix 1 – AFM procedure

PROCEDURE TO CONTROL WATER INJECTION SYSTEM

WATER INJECTION circuit breaker ……	ON
TCL ……	T_Q = min. 60%
WATER INJECTION / ON push-button	Push and hold till amber WATER INJECTION signal comes on (on the front control panel)

Before throttling back power:

WATER INJECTION / OFF push-button	Push and check amber WATER INJECTION signal extinguishes

WARNING

IF IT IS NECESSARY TO CHANGE TAKE-OFF RATING WITH WATER INJECTION TO LOWER RATING, WATER INJECTION MUST BE STOPPED PRIOR ENGINE POWER DECREASE OTHERWISE ENGINE FLAME OUT CAN OCCUR.

CAUTION

ITT RISES WHEN WATER INJECTION IS TERMINATED. THEREFORE MONITOR ITT AFTER WATER INJECTION TERMINATION AND THROTTLE BACK THE ENGINES AS REQUIRED TO AVOID EXCEEDING THE MAXIMUM PERMISSIBLE LIMIT OF ITT.

NOTE

If water injection pump was set to appropriate degree according to graph in AFM and corresponding amount of water was filled in into water injection tank, the water injection will not last longer than the permissible time for take-off rating using. After exhaustion of the water supply the injection system pressure drops, the injection pump is shut down automatically, and the WATER INJECTION signal on the CWD goes out.

Issued in Kansas City, Missouri on May 20, 2013.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2013-12517 Filed 05/28/2013 at 8:45 am; Publication Date: 05/29/2013]