

U.S. Department of Transportation Federal Aviation Administration

SAFO

Safety Alert for Operators

SAFO 24003 DATE: 03/04/24

Flight Standards Service Washington, DC

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A SAFO contains important safety information and may include recommended action. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Subject: Aero Vodochody L39 Aircraft with Experimental Airworthiness Certificates Inaccurate Mode C Altitude Reporting.

Purpose: This SAFO informs owners and operators of Aero Vodochody L39 aircraft of erroneous altitude indications presented to the pilot and reported by the Mode C transponder.

Background: The Civil Aviation Authority (CAA) of the Czech Republic notified the FAA International Field Office that its Air Navigation Services reported instances of inaccurate altitude information reporting by L39 aircraft.

Discussion: A technical investigation by the Czech Republic CAA and Aero Vodochody found this inservice issue is caused by the aircraft's pitot-static system characteristics that met a military requirement at the time of aircraft certification in the Czech Republic, but that would fail to meet current requirements applicable to type-certificated civil aircraft.

More specifically, the pitot-static probe P/N LUN 1153-7 and the backup pitot-static probe P/N LUN 1150, as installed in the L39, cause a static pressure source position error that has a negative impact on the accuracy of the altitude indicated to the pilot as well as the altitude reported by the ATC transponder Mode C.

Inaccurate altitude reporting presents a significant risk to the National Air Space (NAS), especially when operating near aircraft equipped with a Traffic Collision Avoidance System (TCAS).

Recommended Action: Owners and operators should contact Aero Vodochody for recommendations to resolve this issue. When contacting Aero Vodochody, owners and operators should reference the CAA Czech Republic letter, ref.: 000590-19-401.

Contact: Questions and comments on this SAFO should be directed to the Aircraft Maintenance Division's Avionics Branch, at (202) 267-1675 or via e-mail: 9-AWA-AFS-300-Maintenance@faa.gov.