

U.S. Department of Transportation Federal Aviation Administration

## **SAFO**Safety Alert for Operators

SAFO 23004 DATE: 07/28/23

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:** Boeing Multi Operator Message (MOM); MOM-MOM-23-0179-01B and Erroneous Maximum Takeoff Weight (MTOW) Calculation from Boeing Performance Engineer's Tool (PET) Reporters.

**Purpose:** This SAFO serves to alert operators of Boeing airplane models, 737-200, 737-300, 737-400, 737-500, 747-200, 747-300, 747-400, 757-200, 767-200, and 767-300 of erroneous MTOW calculation from PET Reporters and the methods for correction.

**Background:** It was recently discovered that the PET reporters may return an erroneous MTOW calculation, which would lead to erroneous V speeds calculation when Improved Climb is used. This in turn may lead to potential safety issue such as runway overrun during Rejected Takeoff (RTO), inability to rotate on takeoff or insufficient climb performance for obstacle clearance.

**Discussion:** An erroneous MTOW only occurs when using PET Reporters (Version 3.4 through 4.4) with Improved Climb. Using PET Reporters without Improved Climb does not experience this condition. The error will only occur with older Boeing Takeoff Performance Subroutine (BTOPS) databases that do not support Fixed Improved Climb (Databases where SCAP Guide Variable POPT(8) = Not Supported).

BTOPS databases which support Fixed Improved Climb (POP (8) is supported) and all Boeing Takeoff Module (BTM) databases do not experience this condition. For more information, refer to Boeing MOM-MOM-23-0179-01B issued March 24, 2023. Operators can also reference MOM-MOM-23-0017-01B issued January 13, 2023; or MOM-MOM-23-0078-01B Issued February 6, 2023 for further background information regarding this error.

**Recommended Action:** In accordance with Boeing MOM-MOM-23-0179-01B, Boeing recommends that affected operators:

- 1) Update PET to Version 4.5,
- 2) Delete any PET Reporters Runway Takeoff Weight (RTOW) charts that were generated using the older versions of PET, and
- 3) Generate new RTOW charts using PET Version 4.5.

**Contact:** Questions or comments regarding this SAFO should be directed to the Aircraft Evaluation Division at 9-avs-afs-100@faa.gov.

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