



AEROSPACE INFORMATION REPORT

AIR1075™**REV. B**

Issued 1974-03
Revised 1996-09
Stabilized 2020-02

Superseding AIR1075A

Barometry for Altimeter Calibration

RATIONALE

This Technical Report contains no changes from the previous revision, other than the addition of a Stabilization Notice Page. This document has been determined to contain stable technical information which is not dynamic in nature.

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FOREWORD

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1. SCOPE:

This SAE Aerospace Information Report (AIR) is concerned only with aspects directly relating to available accuracy. While well-designed photoelectric, inductive or capacitive readers and pressure regulators, and other accessories are highly desirable for convenience and production rate, they are considered to be outside the scope of this AIR.

1.1 Purpose:

This AIR is intended to define three classes of barometers, working, reference and transfer, and some aspects of their use so that altimeters and air data transducers calibrated against working barometers will be comparable. An accuracy of ± 0.003 inch (or ± 0.076 mm) Hg should be approachable with working barometers meeting the recommendations in this AIR.

NOTE: 0.003 inch Hg corresponds to 3 ft of altitude at sea level and 11 ft of altitude at 40,000 feet. (0.076 mm Hg corresponds to 0.8 m of altitude at sea level and 3.4 m of altitude at 12,000 meters.)

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