

**ETSO-C10c**

ED Decision 2020/011/R (applicable from 25.7.2020)

**PRESSURE ALTIMETER SYSTEM****1 Applicability**

This ETSO provides the requirements which pressure altimeter systems that are designed and manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

**2 Procedures**

## 2.1 General

The applicable procedures are detailed in CS-ETSO, [Subpart A](#).

## 2.2 Specific

None.

**3 Technical Conditions**

## 3.1 Basic

## 3.1.1 Minimum Performance Standard

The applicable standards are those provided in SAE International's Aerospace Standard AS8009C, Pressure Altimeter Systems, dated 24 May 2016, as amended by Appendix 1 to this ETSO.

## 3.1.2 Environmental Standard

See CS-ETSO, Subpart A, paragraph 2.1.

## 3.1.3 Software

See CS-ETSO, Subpart A, paragraph 2.2.

## 3.1.4 Airborne Electronic Hardware

See CS-ETSO, Subpart A, paragraph 2.3.

## 3.2 Specific

The declaration of design and performance (DDP) and the installation manual shall state the maximum calibrated altitude.

## 3.2.1 Failure Condition Classification

See CS-ETSO, Subpart A, paragraph 2.4.

**4 Marking**

## 4.1 General

See CS-ETSO, [Subpart A](#), Paragraph 1.2.

## 4.2 Specific

None.

**5 Availability of Referenced Documents**

See CS-ETSO, [Subpart A](#), paragraph 3.

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[Amdt ETSO/6]

## Appendix 1 to ETSO-C10c – Minimum Performance Standard (MPS) for Pressure Altimeter Systems

*ED Decision 2020/011/R*

This Appendix defines the modifications and additions to the MPS for pressure altimeter equipment specified in SAE AS8009C, Pressure Altimeter Systems, dated 24 May 2016.

SAE AS8009C Section(s)	Change
3.4	<p><b>Add a note following the paragraph to read:</b></p> <p><b>Note:</b> Markings for the altitude range may be omitted for instruments that use a tape-type display.</p>
3.10	<p><b>Delete current Section 3.10 and Table 9. Replace with the following:</b></p> <p><b>3.10 Temperature Corrections</b></p> <p>Altimeters covered by this standard shall not incorporate automatic temperature corrections.</p>
3.11	<p><b>Add a new third paragraph to read:</b></p> <p>Instruments that use a tape-type display or present altitude with a digital readout are permitted to use tic marks every 100 feet with a more prominent mark every 500 feet in agreement with SAE ARP4102/7, Appendix A, Symbols 39 and/or 40.</p>
3.12	<p><b>Change the third sentence to read:</b></p> <p>The word ALTITUDE or ALT may be marked on the dial in capital letters and may be in the same finish as the numerals.</p>
3.12	<p><b>Add a note following the paragraph to read:</b></p> <p><b>Note:</b> Markings for the altitude range may be omitted for instruments that use a tape-type display.</p>
5.	<p><b>Add a new paragraph:</b></p> <p>Some of these tests may be performed only once provided that it is demonstrated that this test will demonstrate performance for each article.</p>
5.10	<p><b>Add a new paragraph:</b></p> <p>For altimeters with an electronic display, this test may be replaced by showing compliance with SAE AS8034C, Section 3.8, Malfunctions/Failure Indications and Section 4.6, Operating Time.</p>
5.11	<p><b>Add a requirement for performance testing of Electronic Display Altimeters:</b></p> <p>Electronic displays shall demonstrate their compliance with the SAE AS8034C requirements specified in Table 10 using the test procedures specified in SAE AS8034C, Section 6, as applicable.</p>
6.29	<p><b>Add a requirement for environmental testing of Electronic Display Altimeters:</b></p>

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	Electronic displays shall demonstrate the compliance of their equipment with the requirements of SAE AS8034B specified in Table 10 using the environmental performance requirements specified in SAE AS8034B, Section 5.
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[Amdt ETSO/16]