

Deviation Request ETSO-C10b#9 for an ETSO approval for CS-ETSO applicable to Aircraft Altimeter, Pressure Actuated, Sensitive Type (ETSO-C10b)

Consultation Paper

1 Introductory Note

The hereby presented deviation requests shall be subject to public consultation, in accordance with EASA Management Board Decision No 7-2004 as amended by EASA Management Board [Decision No 12-2007](#) products certification procedure dated 11th September 2007, Article 3 (2.) of which states:

“2. Deviations from the applicable airworthiness codes, environmental protection certification specifications and/or acceptable means of compliance with Part 21, as well as important special conditions and equivalent safety findings, shall be submitted to the panel of experts and be subject to a public consultation of at least 3 weeks, except if they have been previously agreed and published in the Official Publication of the Agency. The final decision shall be published in the Official Publication of the Agency.”

2 ETSO-C10b#9 Aircraft Altimeter, Pressure Actuated, Sensitive Type

2.1 Summary of Deviation

Deviates from ETSO-C10b section 3.1.1 by using SAE AS8009 “Pressure Altimeter Systems” Revision B dated September 21st, 2005 instead of SAE AS392C.

2.2 Original Requirement

ETSO-C10b:

3.1.1 - Minimum Performance Standard

Standards set forth in the SAE Aerospace Standard (AS) document: AS 392C, „Altimeter, Pressure Actuated Sensitive Type“, revision date February, 1959 with the following exceptions, and as amended and supplemented by this ETSO:

Exceptions

- (i) The following specifically numbered paragraphs in AS 392C do not concern minimum performance and therefore are not essential to compliance with this paragraph: 3.1, 3.1.1, 3.1.2, 3.2, 3.2(a)(b)(c)(d)(e)(f).
- (ii) In lieu of Section 7. in AS 392C, it is a requirement that the altimeters covered by this section be capable of successfully passing the test in paragraphs 7.1 through 7.5 and an External Case Pressure Test which is as follows:

External Case Pressure Test The static pressure source of the instrument shall be sealed when an ambient temperature of 25°C and an ambient pressure of 29.92 inches (absolute) of mercury have been achieved. The ambient pressure shall then be increased at a rate of 20 inches of mercury in two seconds to 50 inches (absolute) of mercury and held at that pressure for three minutes. There shall be no adverse effect on the instrument or its accuracy.

(iii) The „Reference Section“ under Table II of AS 392C is not applicable.

2.3 Industry

A similar deviation had already been granted against SAE AS8009A (ETSO-C10b#1). Use of AS8009B instead of AS8009A as it is the more recent standard.

2.4 Equivalent Level of Safety

ELOS is provided by the use of a more recent document reflecting industry consensus on airborne pressure altimeter systems.

2.5 EASA position

We accept the deviation.