European Aviation Safety Agency

European Technical Standard Order

Subject: AIRCRAFT ALTIMETER, PRESSURE ACTUATED, SENSITIVE TYPE.

1 - Applicability
This ETSO gives the requirements which altimeters pressure actuated that are 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
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
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.
3.1.2 – Computer Software
None
3.2 - Specific
None

4 - Marking
4.1 - General
Marking is detailed in CS-ETSO Subpart A Paragraph 1.2. In addition, the maximum altitude for which altimeter is qualified to operate shall be legibly and permanently marked.
4.2 - Specific
None.
5 - Availability of Referenced Document
See CS-ETSO Subpart A paragraph 3.