

European Aviation Safety Agency

European Technical Standard Order (ETSO)

Subject: MANIFOLD PRESSURE INSTRUMENTS

1 – Applicability

This ETSO gives the requirements which manifold pressure instruments 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

Standard set forth in the SAE Aerospace Standard (AS) document: SAE AS 8042 from December 1, 1985, unless otherwise specified by Appendix 1 to this ETSO.

3.1.2 – Environmental standard

The Manifold Pressure Instruments must be tested according to Section 7 of SAE AS 8042 and the environmental test procedures as defined in CS-ETSO, Subpart A, paragraph 2.1.

3.1.3 – Software

If the Manifold Pressure Instruments includes a digital computer, see CS-ETSO, Subpart A, paragraph 2.2, for software development.

3.1.4 – Airborne electronic hardware

See CS-ETSO, Subpart A, paragraph 2.3.

3.2 – Specific

None.

3.2.1 Failure condition classification

See CS-ETSO, Subpart A, paragraph 2.4.

Failure of the function defined in paragraph 3.1.1 of this ETSO has been determined to be a major failure condition. The applicant must develop the system to at least the design assurance level commensurate with this failure condition.

4 – Marking

4.1 – General

Marking is detailed in CS-ETSO, Subpart A, paragraph 1.2.

4.2 – Specific

None.

5 – Availability of referenced document

See CS-ETSO, Subpart A, paragraph 3.

APPENDIX 1

MINIMUM PERFORMANCE STANDARD FOR MANIFOLD PRESSURE INSTRUMENTS

This appendix lists EASA modifications to the MPS for Manifold Pressure Instruments.

The applicable standard is SAE AS 8042, Manifold Pressure Instruments, dated December 1, 1985.

1. Manifold Pressure Instruments are not required to meet the requirements in SAE AS 8042, paragraphs 3.1, 3.2, and 3.3.

2. Replacement of SAE AS 8042, paragraph 3.24.2 (Fire Hazards), by:

'Except for small parts (such as fasteners, grommets, knobs, seals, and small electrical parts) that would not contribute significantly to the propagation of a fire, all material used must be self-extinguishing when tested in accordance with the requirements of CS 25.869(a)(4) and the applicable portions of Part I, Appendix F.'