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.'