ETSO-C106
Date : 24.10.03

European Aviation Safety Agency

European Technical Standard Order

Subject: AIR DATA COMPUTER

1 - Applicability

This ETSO gives the requirements which air data computers 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) AS 8002 „Air Data Computer“, dated April 1, 1985 as amended by this ETSO:

- Paragraph 4.2 of document AS 8002 shall be deleted and replaced by the following:

  - Static source Error Correction (if applicable)

  Unless otherwise noted. outputs may be corrected for static source errors of the specific aircraft model in which the computer is intended to be used.

  The tolerance of correction value produced from the correction profile (correction curve) residing in the computer shall be the sum of the following:

  A - plus or minus of theoretical value of correction or equivalent of plus or minus 8.44 Pa (.0025 inch Hg) static pressure, whichever is greater.

  B - Value of correction curve slope times the tolerance of independent variable programming the correction curve.

  When testing corrected parameters (altitude, airspeed or mach) the nominal value of the parameter at each test point indicated in Tables 1, 3 or 4 shall be adjusted to include the correction value with tolerance limits set per (A) and (B) above.

- Exception TABLE 3, CALIBRATED AIRSPEED: A looser tolerance of plus or minus 6.5 km/h (3.5 knots) may be used at the 148 km/h (80 knots) reference point.

3.1.2 - Environmental Standard

See Subpart A paragraph 2.1

3.1.3 - Computer Software

See Subpart A paragraph 2.2

3.2 - Specific

None

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.