ETSO-2C91a Date: 24.10.03

European Aviation Safety Agency

European Technical Standard Order

Subject: EMERGENCY LOCATOR TRANSMITTER (ELT) EQUIPMENT

1 - Applicability

This ETSO gives the requirements which emergency locator transmitter equipment that is 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 - General

3.1.1 - Minimum Performance Standard

Standards set forth in EUROCAE document ED-62 (or RTCA DO-183 Section 2.0, change 1 dated Jan. 17, 1983) as amended and supplemented by this ETSO:

- (i) In lieu of optional Paragraph 2.2.2.2b of DO-183 for modulation characteristics the following applies as a requirement for this ETSO: to aid SAR satellite detection the ELT shall have clearly defined sideband components which are symmetric about the output signal spectrum and distinct from the carrier component at both the 121.5 and 243 MHz frequencies. The ELT spectrum at 121.5 MHz shall have at least 30% of its energy distribution within a bandwidth of ±30Hz about a fixed reference frequency corresponding to the carrier component over the audio/sweep modulation cycle. At 243 MHz 30% of the energy distribution shall fall within a bandwidth of ±60 Hz.
- (ii) In addition to paragraph 1.0, General Standards, of RTCA DO-163, all materials used except small parts (such as knobs, fasteners, seals, grommets and small electrical parts) that would not contribute significantly to the propagation of a fire, must be self-extinguishing when tested in accordance with applicable requirements of CS 25 Appendix F.

3.1.2 - Environmental Standard

See CS-ETSO Subpart A paragraph 2.1

3.1.3 - Computer Software

See CS-ETSO 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

ETSO-2C91a

See CS-ETSO Subpart A paragraph 3.