Federal Communications Commission

§ 2.1505

field tests conducted without expense to the FCC or, if deemed necessary, at the laboratory or in the field by FCC personnel. This may include the actual submission of equipment for system testing under the provisions of §2.945 of part 2 of the Rules.

(9) No technical system will be deemed approved unless and until the FCC has notified the applicant in writing of the approval. Such notification of approval will be by letter to the applicant.

(10) Approval by the FCC is limited to a determination that the particular technical system (the scheme for encoding and decoding the subscription TV signal) is capable of meeting the criteria given in §73.644(b).

(11) The FCC will maintain a listing of approved technical systems.

(c) Multichannel sound may be transmitted for stereophonic or bilingual service with encoded subscription programs provided the technical operating specifications for this service are included in the application for advance system approval.

(d) Subscriber decoder devices must comply with any applicable provisions of subpart H, part 15 of the FCC Rules for TV interface devices.

(e) No modifications may be made by either the applicant or the user of a system having advance FCC approval that would change any of the operating conditions as submitted in the application for advance approval. Should system modifications be necessary, a new application must be submitted in accordance with the requirements of this section.

[48 FR 56391, Dec. 21, 1983]

Subpart N—FCC Procedure for Testing Class A, B and S Emergency Position Indicating Radiobeacons (EPIRBs)

SOURCE: 56 FR 11683, Mar. 20, 1991, unless otherwise noted.

GENERAL

§ 2.1501 Introduction.

The procedure described herein sets forth uniform methods for testing Class A, B and S Emergency Position Indicating Radiobeacons (EPIRBs) for compliance with the applicable portions of the FCC Rules and Regulations. Other methods and test results may be used provided they are fully documented and deemed by the Commission to yield results equivalent to the procedures set forth in this section.

§ 2.1503 Test environment.

(a) Measurement sites. Radiated emission tests for peak effective radiated power (PERP), spurious emissions and power in the test mode are to be performed on an open field test site as shown in Figure 1. The site is to be located on level ground with an obstruction-free, 60 m by 52 m, elliptical area. The site is to be equipped with an antenna mast capable of adjustment from 1 to 4 m. The center of a metal ground plane at least one wavelength in diameter at 121.5 MHz (2.47 m) is to be located 30 m from the receiving antenna. The ground plane is to have provisions for mounting removable quarter-wave vertical elements to produce a monopole antenna at both 121.5 and 243 MHz with the VSWR of less than 1.5.

NOTE: It is desirable that the level of radiated ambient EME at the test site be at least 6 dB below the FCC limits applicable to the EPIRB. It is, of course, not always possible to meet this condition. If the ambient field strength at some frequencies within the specified measurement ranges is too high, it is recommended that one or more of the following corrective steps be employed:

(1) Perform measurements in critical frequency bands during hours when broadcast and other radio stations are off-the-air and ambient levels from industrial equipment are lower.

(2) Insofar as is possible, orient the axis of an open area test site to discriminate against strong ambient signals.

(3) Vary the bandwidth of the measuring instrument to separate ambient EME from emissions from the EPIRB.

(b) Temperature. Except as otherwise noted, the ambient temperature during testing is to be within the range of 4 to 35 °C (40 to 95 °F).

§ 2.1505 Test instrumentation and equipment.

(a) Receiver (field intensity meter). A calibrated field intensity meter (FIM) with a frequency range of 30 to 1000 MHz is required for measuring radiated