

American Telecommunications Certification Body Inc.  
6731 Whittier Ave, McLean, VA 22101

08/07/2001

Daniel Baltzell  
Rhein Tech Labs

In reference to FCC ID: AWWFRS1400

Mr. Baltzell

Upon completion of review of the Maxom Family Service Radio application FCC ID: AWWFRS1400, there are several discrepancies that must be addressed before the application can be granted by ATCB.

Please address each issue below.

- 1) The theory of operation refers to an amplified signal of 0.47Watts from the amplifier, this appear inconsistent with the 0.038W ERP output.
- 2) Please provide test data the maximum radiated power from the antenna and the manufacturers rated output for the device.
- 3) Please provide information on the antenna itself including antenna gain.
- 4) Please provide information on compliance of this device to requirements of FCC Bulletin OET 65C RF Exposure Requirements.
- 5) Is this device being categorized as a mobile or portable device for purposes of RF Exposure?
- 6) If categorized as a Mobile device under FCC Part 2.1091, please explain how it meets the Mobile device criteria
- 7) If classified as a Portable device under FCC Part 2.1093, please provide information on how this device meets the criteria of the FCC exclusion list for RF Exposure and can be certified by a TCB.

David A. Case NCE  
Examining Engineer  
<mailto:dcase@AmericanTCB.com>

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination.

Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.



TCB TRAINING  
UNLICENSED DEVICES

PART 4

Richard Fabina

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## MEASUREMENT STANDARDS

- I. ANSI C63.4-1992 - Part 15 testing bible (15.31(a)(6))
  - A. Includes all Part 15 devices except: Spread spectrum, unlicensed PCS, UNII, and transmitters operating below 30 MHz
    - 1. Excluded Section 5.7 (Use of artificial hand)
    - 2. Excluded Section 9 (Use of absorbing clamp measurements)
    - 3. Excluded Section 14 (Use of click relaxation for digital devices)
    - 4. Excluded Section 8.2.2 (Use of a rod antenna for radiated measurements below 30 MHz)

**Note: There is an error in these rules that does not include the exception for Section 8.2.2 of ANSI C63.4. If you read the rulemaking that adopted the 1992 version of C63.4, it becomes apparent from the discussion that the Commission does not accept radiated emission measurements below 30 MHz that were made with a rod antenna.**

- B. Swept frequency devices are measured with the sweeping stopped (15.31(c))
  - C. Devices tested on site must be measured at 3 sites (15.31(d))
    - 1. Test sites may include: (1) manufacturer's facility, (2) test site facility and (3) one installation site
      - a. Sites must be representative of actual installations
  - D. AC power varied from 85 % to 115 % normal rating (15.31(e))
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