HYAK LABORATORIES, INC.

7011 CALAMO STREET, SUITE 107 SPRINGFIELD, VIRGINIA 22150 (703) 451-1188 FAX (703) 644-7492

ENGINEERING STATEMENT

IN REGARD TO MEASUREMENTS ON

WIRELESS MARKETING CORPORATION

FCC ID: MGPWX-TR1

MODEL: First Alert WX-TR1

A. INTRODUCTION

Hyak Laboratories Inc. has been authorized by Wireless Marketing to perform measurements on a Model WX-TR1 R/C transmitter to determine compliance with FCC Rules, Subpart C, Para. 15.231(a).

The transmitter is a low powered device designed for remote control of a weather alert alarm. It operates at a nominal 350 MHz frequency. The transmitter, constructed on an etched circuit card, is powered by a 12 volt battery.

The WX-TR1, operates when triggered by a NOAA weather alert receiver. Transmission ceases within 5 seconds of the trigger.

No external antenna is used.

B. DESCRIPTION OF MEASUREMENT FACILITIES

A description of the Hyak Laboratories Inc. radiation test facility is a matter of record with the FCC. The facility was accepted for radiation measurements on October 1, 1976, and is currently listed as an acceptable site.

C. DESCRIPTION OF MEASUREMENT PROCEDURE: RADIATED MEASUREMENTS

Measurements of transmitter radiation field strength were made using ANSI C64.3 (1992) as the test procedure. Measurements were made with 3 meter spacing between the transmitter under test and the test equipment antenna.

A fresh 12 volt battery was installed.

C. DESCRIPTION OF MEASUREMENT PROCEDURE: (Continued)

The transmitter under test was placed on a rotatable table approximately 80 cm in height.

Measurement of field strength was made through use of HP 8596E and Tektronix 494P spectrum analyzer in conjunction with a HP 8447D and Avantek wide band, low noise preamplifiers; and an Advantest R3361A spectrum analyzer with quasi-peak detector.

Above 1 GHz the 494P spectrum analyzer, a peak responding device, was used with Avantek amplifiers.

Eaton 96005 or Emco 3104C calibrated antennas were used as the test antennas in the 25-1000 MHz range. Polarad CA-L and CA-S or EMCO 3115 calibrated horn antennas were used between 1 and 3.5 GHz.

The transmitter is modulated by a continuous 38 kHz signal.

No RF signal averaging was used (See Table 1).

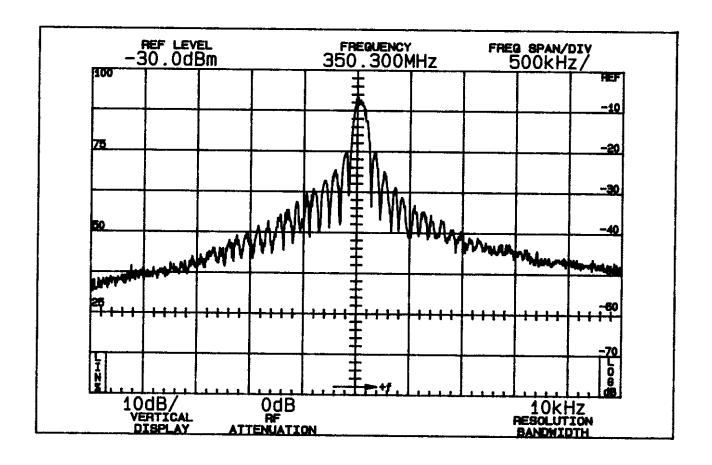
For each spurious emission identified between 30 MHz and the tenth harmonic the test assembly was rotated for maximum pickup, the test antenna varied in elevation and the test antenna polarization shifted between horizontal to vertical in order to maximize observed signals.

The measurement procedure included recording the worst-case field strength for receiving antenna polarization, test antenna height variation from 3 feet to 10 feet, test sample rotation, and placing the test sample on each of its major planes.

The spectrum was checked from 30 MHz to the tenth harmonic. All emissions not reported were more than 20 dB below the permitted level or below FCC limits but in the ambient/system noise floor. Tabulation of the measurements are shown in Table 1.

Specific forbidden band scans were made per Paragraph 15.205 and 15.209.





Center Frequency 350.3 MHz

Horizontal:

500 kHz

Vertical:

10 dB/Div.

Resolution:

10 kHz

No video filtering.

OCCUPIED BANDWIDTH FCC ID: MGPWX-TR1

FIGURE 4

LIST OF EXHIBITS

- 1. FCC ID LABEL
- 2. PHOTOGRAPHS
- 3. SCHEMATIC DIAGRAM
- 4. USER INSTRUCTIONS
- 5. BLOCK DIAGRAM
- 6. CIRCUIT DESCRIPTION