FCC ID: N6TSCACEJ

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Technical Report No. 99-032

"Radiated Field Intensity Measurement of the Chapman Technologies, Inc Personal Safeguard Companion

FCC ID N6TSCACEJ

Performed: 6 May 1999

Customer: Chapman Technologies, Inc.

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Company Official responsible

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Test Performed &

Reported by: J.R. Nicholson

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Director, FAU EMI R & D Laboratory

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1. OBJECTIVE

The Chapman Technologies, Inc. 'Personal Safeguard Companion' #1021 was measured to determine the maximum field intensity level radiated at fundamental frequency. The results reported in this 2 page document apply only to the specific items of equipment, configurations (including software/unit operation), and procedures supplied to the Florida Atlantic EMI Research Lab by Chapman Technologies, Inc as reported in this document.

2. TEST PROCEDURES

The measurement techniques identified in measurement procedure ANSI C63.4-1992 "American National Standard of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40 GHz" were followed as close as practical during this evaluation. Complete details and specific procedures used are discussed in the following paragraphs.

3. RADIATED EMISSIONS

The 'Personal Safeguard Companion' unit was set up on a wooden turntable 80 centimeters above the ground plane floor of the FCC listed Semi-Anechoic test site. Radiated emission measurements were performed with the unit positioned on its foot, with the antenna in the vertical upright position.

N EMCO 3121 Tuned Dipole DB-4 s/n 1011 Antenna was installed on an EMCO pneumatically controlled Antenna Mast at a distance of 3 meters form the unit. The unit, transmitting at full power through its normal antenna at 834.580MHz, was observed for maximum radiated emission levels on a HP 8566B Spectrum Analyzer (1 MHZ res/vid bw, freq span 500 kHz, through a Quasi-Peak Adapter, for a final bandwidth of 120 kHz). The turntable was rotated through 360 degrees, the antenna was scanned in height from 1 to 4 meters in both the horizontal and vertical polarizations and the "peak" induced voltage (dBuV) plus cable loss (4.3 dB) plus dipole antenna factor (27.6 dB) resulted in the following "peak" field intensity levels.

DIPOLE

POLARITY FOOT

HORIZ 119.0 dBuV/m

VERT 123.6 dBuV/m

This data shows a maximum "peak" field intensity level of 123.6 dBuV/m or 1.514 Volts per meter a distance of 3 meters.