HYAK LABORATORIES, INC.

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ENGINEERING STATEMENT

In Connection With

EVENFLO COMPANY, INC.

Model No. 612

FCC ID: EHK612TEVENFLO

Hyak Laboratories, Inc. has been retained to perform radiated and conducted spurious measurements on the Evenflo Company Company Model 612 transmitter in accordance with the provisions of Section 15.235 of the FCC rules, Part 15.

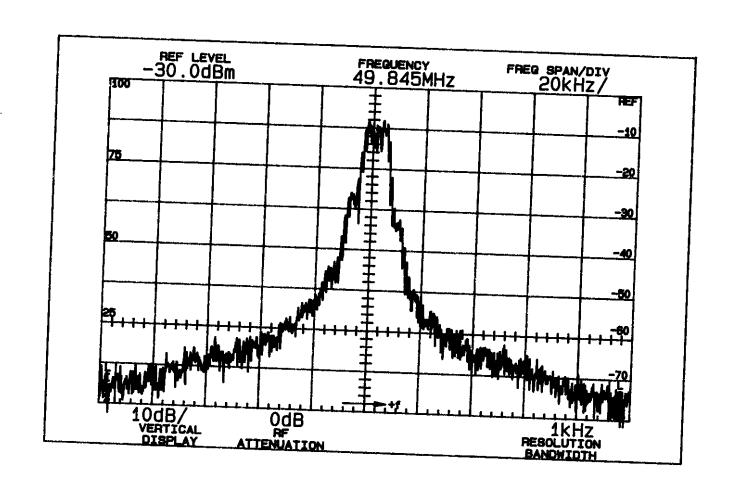
I am an Electronics Engineer, a principal in the firm of Hyak Laboratories, Inc., Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission, having submitted numerous applications for equipment authorization.

All tests were made by me or under my supervision in accordance with the rules and regulations of the Federal Communications Commission.

Rowland S. Johnson

Dated: June 4, 1999

FIGURE 1a

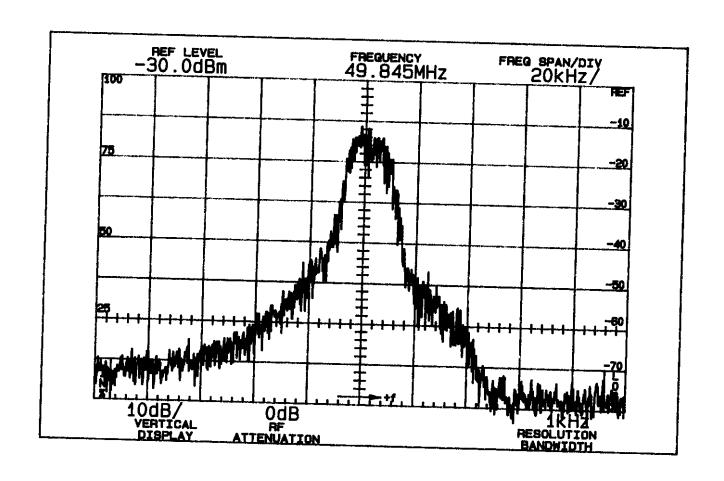


85%, 2500 Hz Modulation

OCCUPIED BANDWIDTH 2500 Hz Modulation FCC ID: EHK612TEVENFLO

FIGURE 1a

FIGURE 1b



Loud Voice Modulation

OCCUPIED BANDWIDTH Loud Voice Modulation FCC ID: EHK612TEVENFLO

FCC ID: EHK612TEVENFLO

TABLE 1

RADIATED SPURIOUS EMISSIONS
FCC Part 15

Frequency		FCC	Part 15		
To Which Tuned (MHz)	Spurious Frequency (MHz)	Meter Reading (dBm)	Antenna Factor (dB)	Field Intensity uV/m @ 3m	FCC Limit dB to
49.476	49.847	-41.2V	5.1	3507.5	10000 - 9.1
49.476 49.476 49.476 49.476 49.476 49.476 49.476 49.476	99.692 149.541 199.388 249.235 299.082 348.929 398.776 448.623 498.470	-82.4V -104.8H -104.0H -104.8H -105.6V -105.6V -104.8H -104.8H	11.2 14.9 17.5 19.6 21.3 22.8 24.1 25.2 26.2	61.7 7.2 10.6 12.3 13.6 16.2 20.7 19.5 26.3	150 - 7.7 150 - 26.4 150 - 23.0 200 - 24.2 200 - 23.3 200 - 21.8 200 - 19.7 200 - 20.2 200 - 17.6
Occupied Bandwidth					
49.476	f _C -10 kHz	(1) -32 d	B to f _C	80.5	161 - 6.0
49.476	f _C +10 kHz	(1) -30 d	B to f _c	101.4	161 - 4.0

Frequency range of 30 to 499.0 MHz was scanned. No signals exceeded limits and all signals greater than 20 uV/m @ 3m are shown above.

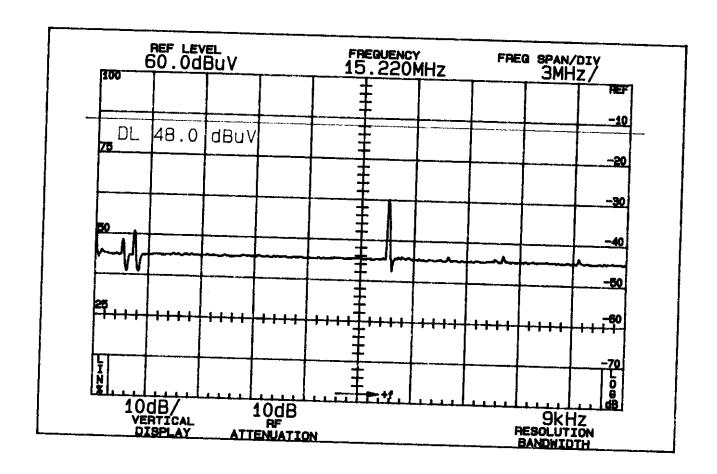
(1) From Figure la

RADIATED FIELD INTENSITY FCC ID: EHK612TEVENFLO

^{*}Reference data, 20 dB or more below FCC limit.

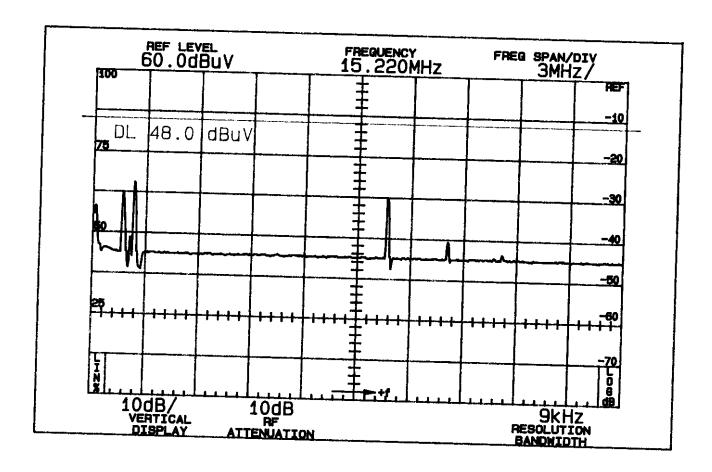
P = Worst-case test antenna polarization.

FIGURE 2



LINE CONDUCTED EMISSIONS FCC ID: EHK612TEVENFLO

FIGURE 3



LINE CONDUCTED EMISSIONS FCC ID: EHK612TEVENFLO

FIGURE 3 (Right LISN)

PROCEDURES, EMISSION BANDWIDTH

Measurement of emission bandwidth was made with a 2500 Hz tone at a sufficient level to produce 85% of limiting modulation.

The input signal was coupled directly to the audio input stage of the device.

A Tektronix 494P spectrum analyzer was used; input audio signal was from a IEC F-47 function generator; audio level was determined with a Fluke 8920A TRMS voltmeter; modulation was measured with a Boonton 8220 modulation monitor.

A second plot was made with loud voice signal.

PROCEDURES, RADIATED SPURIOUS EMISSIONS

Procedures of ANSI 63.4 - 1992 were followed.

The field strength of the radiated emissions from the device was measured at a distance of 3 meters. The spectrum was scanned from 30 MHz to the tenth harmonic using a HP 8596E spectrum analyzer and HP 8447D low-noise preamplifier.

Measurement procedure included recording the worst-case field strength for receiving test antenna polarization, test antenna height variation from 1 meter to 3 meters and test sample rotation, and test sample antenna in both vertical and horizontal plane.

The test sample was placed on a rotatable 80 cm high wooden stand. The receiving antenna, placed 3 meters from the test sample, was a Eaton/Singer DM-105 calibrated dipole set. Power supply was the 9 volt plug-in transformer supplied with the test sample.

The test sample was measured in the bottom down, face down, and side down positions.

The spectrum was checked from 30 to 499 MHz. All emissions not reported were less than 20 uV/m θ 3m. Tabulation of the measurements are shown in Table 1.

PROCEDURES, AC LINE CONDUCTED SPURIOUS

Power line conducted spurious were measured from .45 to 30 MHz using an IEEE 213 line impedance stabilization network, (LISN), modified for a 50 uH network.

The device under test was placed in a 10x10x8 foot shielded room on a 1 meter high wooden stand centered in the shield room. The LISN network was placed in contact with the conductive floor at the base of the test stand.

Coaxial cables to the left and right LISN output ports were connected by RG 55/U coaxial cale to bulkhead connectors on the shield room, to a shielded high-isolation SPDT coaxial relay and then to the spectrum analyzer 50 ohm input port. When measurements were made, the un-used LISN port was terminated in 50 ohms.

The device under test was operated in modes which maximized observed spurious.

An Advantest R3361A spectrum analyzer was the detector, using a 9 kHz resolution bandwidth. The spectrum analyzer was in the CISPR quasi-peak detector mode, with a 120 second scan.

Plots are shown in Figures 2 and 3. The 250 microvolt limit (48 dBu) is shown as a red line.