George Tannahill
Ref: FCC ID: IFHFLA54SX
Confirmation # EA94734

Per your 6 Dec 1999 inquiry , correspondence ref. # 10946:

1. Necessary bandwidth system deviation 2.5 kHz. Nominal modulation frequency: 500 Hz.

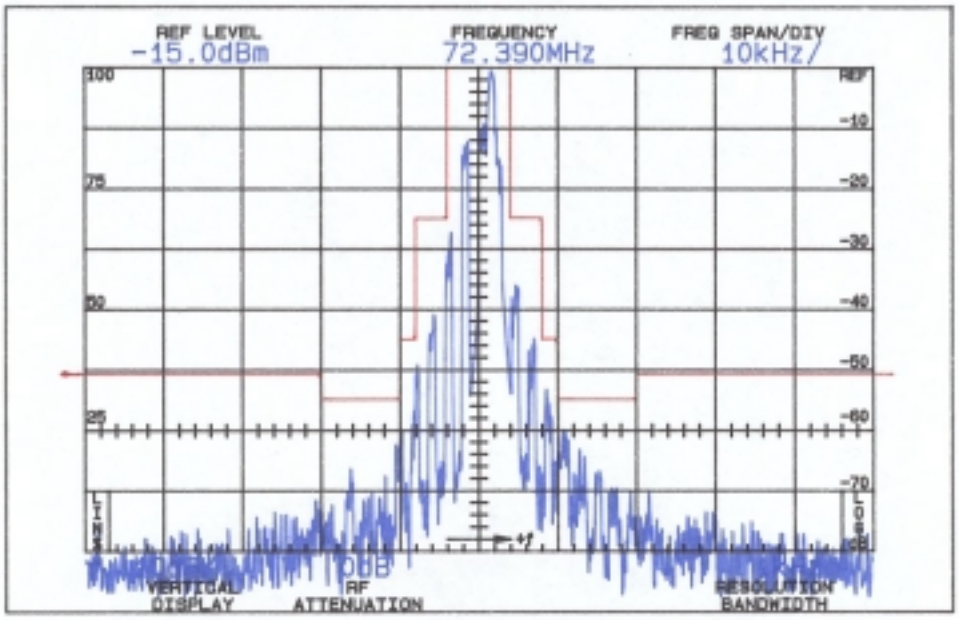
   2D + 2M = N.B.

   5 kHz + 1 kHz = 6.0 or 6k0F1D

2. Modulation is not FSK. Transmitter frequency is crystal controlled oscillator modulated by a varicap driven by five cycles of nominal 2 mS duration equivalent to a 500 Hz tone. (See Figure 2). This pattern is repeated at a nominal 20 millisecond rate.

3. Plot of occupied bandwidth with limits of 95.635 is included as Figure 1a (note that using a 100 kHz RBW does not resolve the modulation, see Figure 1b). Unmodulated carrier plot is Figure 1c.

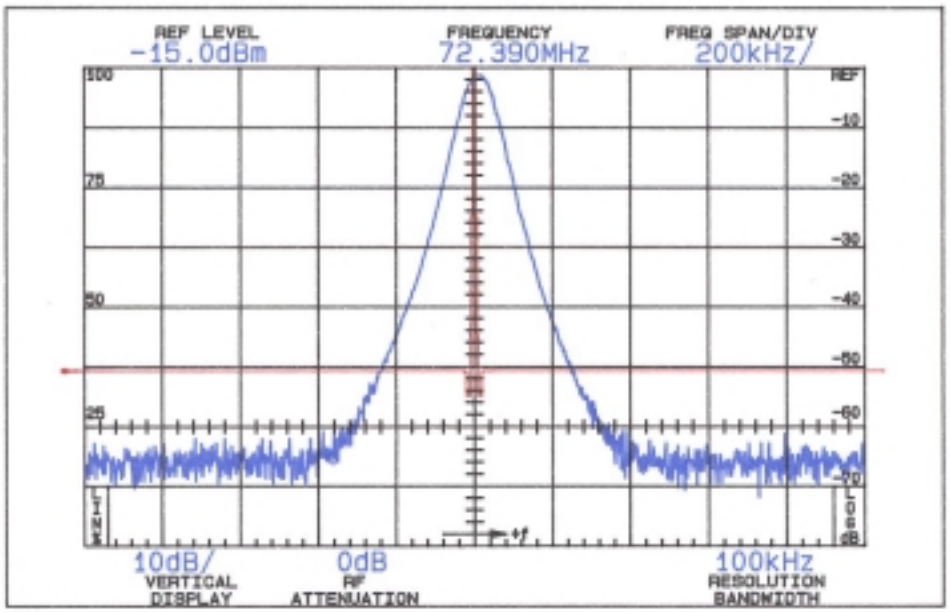
FIGURE 1a



FCC ID: IFHFLA54SX
OCCUPIED BANDWIDTH
RBW 1 kHz, No Video Filter

FIGURE 1a

FIGURE 1b

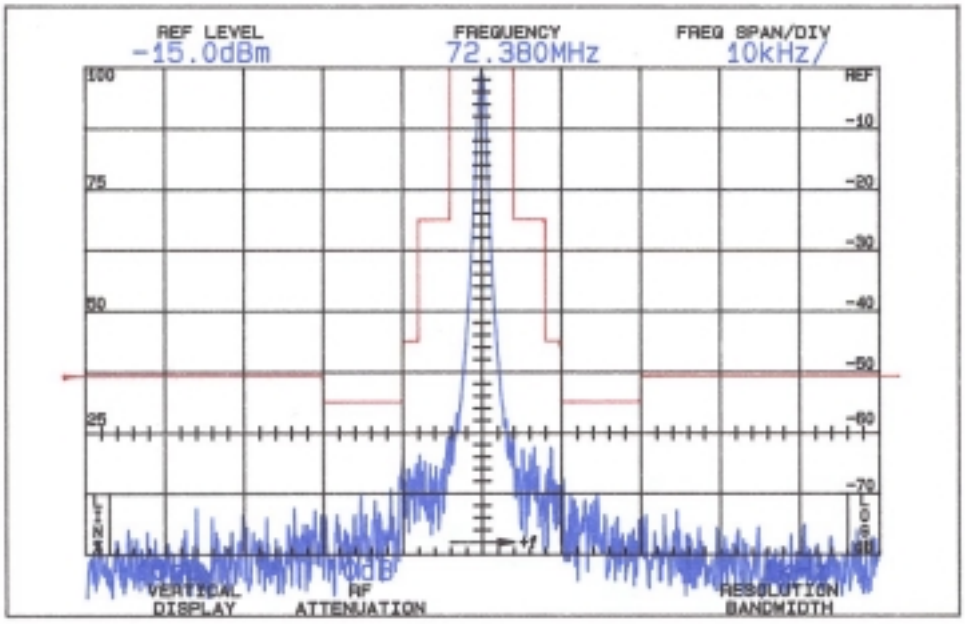


FCC ID: IFHFLA54SX
OCCUPIED BANDWIDTH
RBW 100 kHz, No Video Filtering

(Does Not Resolve Modulation)

FIGURE 1b

FIGURE 1c



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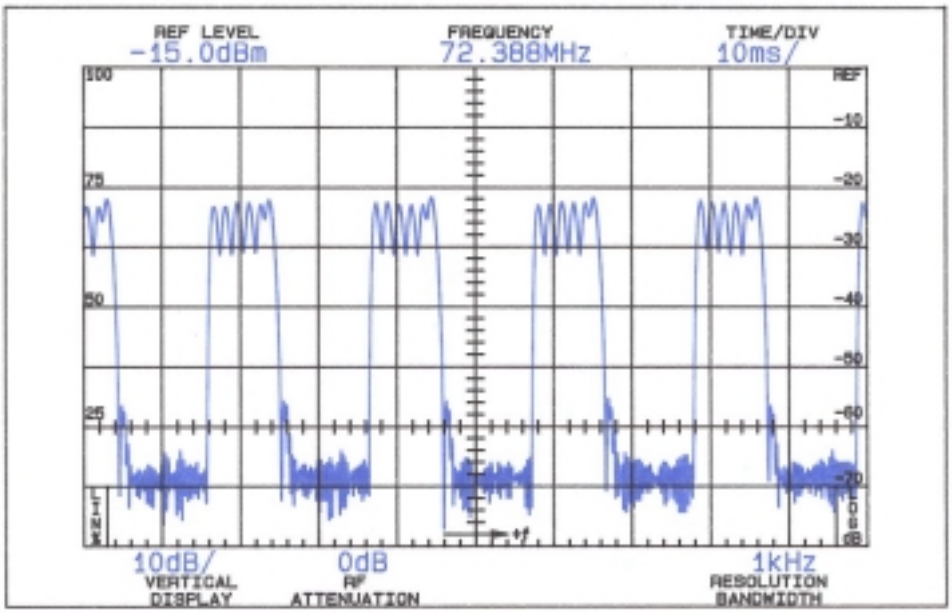
OCCUPIED BANDWIDTH
UNMODULATED CARRIER

FIGURE 1c

FIGURE 2



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TIME DOMAIN
10 mS/Div (Scope Detection)

FIGURE 2