



August 25, 2006

Federal Communications Commission
Equipment Authorization Division
Application Processing Branch
7435 Oakland Mills Road
Columbia, MD 21046

Re: ORTOVOX d3 Avalanche Transceiver/ Beacon Technical Description

Dear Sir or Madam:

The d3 Avalanche Beacon consists of a transmitting circuit and a receiving circuit. Each circuit has an antenna. Both of these antennae are ferrit metal that work in either mode – transmitting or receiving.

The transmitter has a local x-tal-stabilized oscillator working frequency, 457 kHz +/- 80 Hz.

A pulse generator modulates the 457 kHz oscillator such that the modulation is a type A1A pulsed carrier. Its "on" time is approximately 80 to 120 milliseconds as per the standard. An amplifier amplifies the modulated signal and drives the transmitting ferrit antenna.

The ferrit antennae receive the signal from the transmitting avalanche beacon. After the 457 kHz signal is amplified, it is then mixed with the 455 kHz oscillator's signal. The demodulator's output is a 2 kHz signal. The low frequency amplifier amplifies the 2 kHz signal which then goes to a rectifier.

The microprocessor makes an analog-digital conversion while controlling the numerical display and the left-right-center lights. The sound (amplitude and cadence) generated by the loudspeaker is a digitally generated signal depending on the specific phase of the search.

Sincerely,

Marcus L. Peterson, General Manager
ORTOVOX USA, Inc.
455 Irish Hill Road
Hopkinton, NH 03229

MLP/jkap