EXHIBIT 1

CFS8DL5814

Functional Description.

The **5814** is a battery powered security contact transmitter and is part of a wireless alarm system.

The device consists of a single PCB mounted in a plastic case. The PCB includes the RF transmitter circuitry. Upon detection of a magnetic reed switch opening or closing, a message is transmitted by the RF transmitter to a security system.

These messages are transmitted at 345Mhz +/-82kHz using on-off keyed AM modulation.

In addition to the alarm message, the **5814** sends a regular supervision or check-in message every 72 minutes (+/- 16.666%), this complies with Pt 15.231(a)(3).

EXHIBIT 2

Circuit Description. **CFS8DL5814**

The 5814 RF transmitter circuitry is constructed on a single PCB.

The PCB contains the control ASIC U1. he ASIC includes the unique transmitter ID, as well as controlling data timing and supervision message timing.

The transmitter is a SAW resonator Colpitts oscillator, Q2, XL1 etc. The transmitter is on-off keyed (AM) modulated by a control signal from the ASIC which turns current source Q1/Q3 on or off, thus modulating Q2. The antenna is a PCB loop which is series resonant with C9 and C8.

Power is supplied by a single 3V battery.

EXHIBIT 3

CFS8DL5814

Message protocol, timing and duty cycle calculation.

The data output is phase-encoded Manchester which has inherent 50% duty cycle and consists of 64 bits per data word.

A supervision transmission is five identical words separated (start to start) by nominal 125mSec (100mS min, 150 mS max). Each message has a nominal data rate of 3.7 kB/s (3.2 kB/s min to 4.2 kB/s max).
Therefore the duty cycle calculation, for the purposes of calculating peak-to-average field strength is as follows;

Duty Cycle = Actual Transmit Time / 100mSec (averaging period)

and Actual Transmit Time =

64 (bits) X 0.5 (Manchester duty cycle) X 1/(min data rate)

= 64 X 0.5 X 312.5uSec = 10 mSec.

Therefore duty cycle = 10/100 = 0.1. and peak to average field strength is 20 dB.

Total worst case on-air time for a supervision transmission is
64 X 312.5 X 4 X 150 (time between messages)

Supervision On-Air time = 0.62 seconds.

In the case of an alarm transmission, the group of five messages described above is repeated twice (i.e. total of ten repetitions). The second group of five is delayed for 1 second after the start if the first five, therefore worst case on air time is

2 X (supervision on-air time) + 1

= 2.24 seconds.

SUMMARY:- On-Air time = 2.24 seconds max
Duty Cycle = 10% max