

# RF device 'sniffs' out illegal phones

Berkeley Varitronics Systems has released a handheld mobile phone detector fittingly called the Bloodhound that enables security officers to scan real time for unauthorised mobile phone activity in correctional facilities and detect the precise location of the caller using a direction-finding antenna.

Security officers are losing the battle as more and more contraband mobiles are being smuggled into correctional facilities to conduct criminal activity.

According to Texas state senator John Whitmire, who received threatening calls from a death row inmate with a mobile, the phones smuggled inside prisons are the fastest growing and most alarming development in prison contraband in Texas.

In 2008, correctional officers confiscated 847 contraband phones in Maryland prisons, 2809 in California prisons and 1861 in Mississippi prisons and federal prison officers found 1623 phones.

Correctional officers are playing a cat 'n' mouse game trying to locate and confiscate contraband phones that are being smuggled in even past the best monitoring sensors, X-ray scanners, metal detectors, drug and bomb dogs.

To crack down on the escalating problem, the FCC has been petitioned to allow cell phone jamming.

However, according to Steve Largent, president and CEO of CTIA - The Wireless Association, phone jamming will not fully address the growing problem. Largent instead proposes a detector technology that enables security officers to locate a phone inside a correctional facility without interfering with citizens' or public safety communications.

The mobile Bloodhound has a high-speed scanning multiband receiver harnessed to a phased array dualband DF direction-finding antenna. This allows security officers to 'sniff out' the RF energy as an actual Bloodhound dog can detect a scent that a human could never discern.

When hunting down a wireless target, The Bloodhound's unique algorithm can trigger on to a phone while in use. There is a headphone jack with a progressive audible alert tone and an accompanying vibrator that can alert security officers of phone activity as they move closer to the source. In addition, the onboard pulsating laser will ID the target with a blinking laser dot while in the DF mode.

Phones that are some distance from the base station will transmit at a higher power, whereas output power is reduced as one gets closer to the base station. Since most correctional facilities and prisons use a significant amount of steel they are not RF friendly, producing a reduction in the coupling of the radio waves and thus yielding poorer phone coverage.

The Bloodhound takes advantage of this anomaly, allowing the instrument to 'sniff out' the phone much quicker than if someone was looking for a phone in a mall.

Berkeley Varitronics Systems  
www.bvsystems.com