

Re: GPS trackers – a potential weapon from hell

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2006-02/msg04236.html>

- *From:* "PeteS" <ps@xxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* 24 Feb 2006 03:03:29 -0800
-

zwsdotcom@xxxxxxxxxx wrote:

Joel Kolstad wrote:

The right countermeasure is a strong beacon on the GPS frequencies.

This is a good way to forfeit a very large chunk of change or spend a lot of time in jail if you're caught; there's enough commercial usage of GPS signals

Not really. Consider the field strength of the satellite signals on the ground. You only need to keep your jamming signal say 6dB above that point, within a radius of a few meters. Nobody except perhaps the vehicle next to you will know. Exactly the same principle as the FM car-radio-adaptor devices used for iPods and such; they are strong enough to override a local station within your vehicle, but are barely audible a few meters away.

It's also possible to locate the bug using a passive scanning device, because it is transmitting position data back home on some uplink frequency. (I think it's also possible to detect the GPS receiver itself using similar principles to the TV detector vans used in Britain). Once located, it can of course be removed and reattached to any convenient wild animal.

In my current incarnation, I design GPS tracking units with GSM/GPRS realtime reporting of location (amongst other things).

1. It's difficult enough to get a GPS lock with a clear view of the sky from inside a vehicle, even just under the dash, let alone under a vehicle, and that's with an active antenna (they have LNAs embedded in the antenna) and the latest GSP units.
2. Reporting requires GSM of some description, and if the OP is that paranoid, simply scan for the known GSM bands. Note GPRS is preferred

Re: GPS trackers – a potential weapon from hell

over SMS for a number of practical reasons.

3. Jamming the GPS signal is so easy it's hilarious. I do it inadvertently with extra equipment running on the bench near the antenna.

4. Location tracking via GSM is somewhat imprecise – in the boonies, towers may be, and are, miles apart. Although you'll have an idea of where the GSM unit is, precise location out there is harder to do.

So calm your parania :)

Cheers

PeteS

.