# Cheating Spouses Beware! GPS Trackers , Webcams and Cell Phone Spyware Will Testify to Your Cheating Heart!

By Sharon D. Nelson, Esq. & John W. Simek © 2012 Sensei Enterprises, Inc.

When tears come down,
Like falling rain,
You'll toss around,
And call my name,
You'll walk the floor,
The way I do,
Your cheatin' heart, will tell on you...

### Hank Williams

Just Google the words "cheating spouse" and you'll enter a whole new universe. One element of that universe is technology designed to prove that a spouse (or lover) is cheating. The technologies we see most often in our digital forensics practice are GPS trackers, webcams and cell phone spyware. Family lawyers are scrambling to master the essentials of these technologies, which often violate the law. They may find themselves advising clients not to skirt the law or warning them that their spouses may be spying on them and alerting them to the signs. It is dizzying how often a spouse takes the Fifth Amendment in depositions or at trials these days. We're going to try to give you the essence of how these new technologies work and what the legal implications of their usage may be.

### **Cell Phones**

Let's start with cell phones. Most people think that what they do with their cell phones or smartphones is highly private. It must be since the phone is normally always with you. All those text messages you are sending to your paramour must be private. Not so fast. Like the majority of electronic communications, once you send the message (text, e-mail, etc.) it is out of your control. There is nothing to stop the recipient from sending your text to someone else without your knowledge.

Even if you trust the recipient (because your paramour would never betray you, right?), perhaps you're paranoid about getting caught and delete all the messages after you have read and responded to them. Do you really think the messages are gone, never to be recovered? Guess again. The cellular carriers are now capturing the contents of your text messages and storing them for a period of time. It is unclear how long each carrier maintains the content, but

seven to thirty days seems to be the current retention period based on court reports. You may have to get a court order to get the contents, but the point is that the data exists. In addition, mobile forensics may be able to recover deleted text messages from the device itself and those messages may go back much, much longer. On rare occasions, we've recovered deleted text messages that were two years old. It can be a little expensive to forensically analyze a mobile device, but most scorned spouses are willing to pay any amount of money to get the data.

There may be some legal obstacles for getting access to the data, especially if you are not the owner. However, be aware that some smartphones hold a tremendous amount of data without the user's knowledge. The iPhone is particularly evidence rich. Just like our friends in law enforcement, we do a little "happy dance" when an iPhone comes into our digital forensics lab because we know it's likely to contain a motherlode of evidence.

Another potential source of data could come from the installation of spyware on the mobile device. Understand that it is probably illegal under several federal and state laws, particularly the wiretap laws, to install spyware on a mobile device, but a cheating spouse is a common target for the installation of the monitoring spyware and spouses tend to have no guilt about spying on someone they think is cheating, irrespective of the law. There are many companies that manufacture spyware to be installed on mobile devices. Their functions and cost vary, but you can get some pretty good ones for around a hundred dollars. That will typically get you a subscription to gather data from the phone for a period of time (12 months or so). Probably one of the most powerful products on the market is FlexiSPY, which costs \$350, but is very feature rich.

At the present time, you have to have access to the physical phone to install the software. We're guessing that future versions will have the ability to be remotely installed when the user clicks a link in an e-mail or text message. We think most attorneys will be shocked at the tremendous power of the mobile spyware products. The base features include the ability to listen to the phone calls, capture text messages and have real-time access to the location information via GPS. The higher end products can also be remotely configured via text messaging. Probably the scariest feature is the ability to remotely activate the microphone on the phone, effectively turning it into a bug. Imagine having lunch with several friends while your phone is on the table and not knowing that your spouse has activated the mic and is listening in on the entire conversation without your knowledge.

Many people have phone calls with their lovers while driving – and there too the spouse may be listening. The idea of having a private eye sweep your house for bugs has become outmoded in a world where many device can act as bugs.

You don't necessarily have to install spyware to listen in on conversations. Sherri Peak of Kirkland, WA was being stalked by her husband after they broke up. He installed a GPS locator device in the dashboard of her car, but also listened to her conversations by installing a cell phone with the ringer turned off. He wired the cell phone to the car's battery so the phone would remain charged and set the phone to automatically answer when called. This gave him the ability to listen to any in-car conversation by merely calling the cell phone. Like so many victims, no one believed her story. Finally, two members of the Belleview police department had her car inspected – they almost gave up after two hours of searching. Then one officer thought to pop open the dashboard cover – and there was the cell phone and GPS tracker. As he commented, "it was like – wow – she was right." Robert Peak was sentenced to eight months after pleading guilty to felony stalking in 2006.

## **GPS Devices**

GPS tracking devices are another often utilized technology when dealing with cheating spouses. Be sure to check your state laws to see if you can legally install a GPS tracking device. As an example, in our own state of Virginia, it is illegal to install such a device on a vehicle where you do not have an ownership interest. However, a lease of a certain duration can constitute an ownership interest. State laws on this issue vary widely (and some states have no laws on this matter at all), so be very careful when counseling a client.

There are two types of GPS locators. The active locator technology monitors the device location using GPS and typically transmits that data using a cellular network. Passive GPS devices merely record the device location and do not transmit the data. You will then need to download the data from a passive device for analysis. Expect to pay a few hundred dollars for the device and service depending on the type of device and capabilities.

Active GPS locators can be configured to send you alerts (text or e-mail) whenever the vehicle moves or goes outside a "safe" zone. You may only be interested in location information during certain hours of the day or on the weekend. You may even know the address of the paramour and want to log the time and duration of the visits. Besides configuring alerts, some manufacturers provide a website to track the device. You log on to the website and can see where the device is currently and even the history of its activity.

Don't think that you have to purchase a piece of equipment that is specifically used for tracking. Many smartphones are also capable of GPS tracking. Some providers even offer services to track cell phone location. Although these services are intended to locate family members, it is not uncommon for one spouse to activate location services on the phone of the other spouse. When Apple released iOS 5 for the iPhone 4S, there was a "Find My Friends" application available to meet up and track friends. One enterprising man in New York decided to buy his soon-to-be divorced wife an iPhone 4S and configured the "Find My Friend" app before giving it

to her. He was extremely grateful that Apple helped prove that she was meeting her lover at his place uptown and even posted his appreciation on the Net.

As we tell family attorneys all the time, always instruct your clients NEVER to accept a smartphone as a gift – who knows what additional "gifts" may have been loaded on it before it was given?

Location services for laptops can also be used as tracking devices. Apple provides the "Find My iPhone" app, which can be used on iPhones, iPads, iPod Touch or a Mac. You must configure the application first in iCloud, but then you can see the device location on a map once you log into your account. Don't have an Apple product? You can still get a sense of where a device is by using a product like LoJack for Laptops by Absolute Software. Location information is available whenever the laptop is connected to the Internet so it is much less accurate (or available) than a device that has GPS capability. Most folks will opt for the cell phone to get location information rather than count on the intermittent location information from a product like LoJack for Laptops. In a society where cheating is rife, we are inclined to want all the particulars, right down the precise GPS coordinates.

### **Webcams**

Finally, webcams are increasingly being used to spy on people without their knowledge. In most states, they are illegal in any area where nudity may be expected, typically bathrooms and bedrooms.

In the early days, webcams were cumbersome and difficult to hide. They needed a power source, were fairly large and needed a hard-wired connection to the Internet. Those days are over. The modern webcam can be battery powered and connects to the Internet wirelessly. The cameras are so small that they can appear as jewelry on a Barbie doll. Imagine that Barbie's necklace really isn't a faceted gem, but a low light, high resolution camera that is spying on you. And yes, there is a "webcam Barbie."

Some webcams are used as surveillance devices - innocently to keep an eye on your pets while you are at work or, more deviously, to check on anything that may be going on at home. They can be configured to send you alerts (text, e-mail, etc.) when motion is sensed. Since they are connected to the Internet, you can use your smartphone or office computer to see what motion triggered the alert. In addition, software is available to begin the recording of the video stream when certain events occur or during specific times.

In our family law cases, we see webcams being placed in a bedroom in hopes that they will capture the adultery in living color. The cameras are typically placed in stuffed animals or inserted into book bindings. Since they communicate using WiFi there is no need to hide cables

and wires from sight. Just put the stuffed animal on a bench or shelf with the camera facing, customarily, your bed.

Once the webcam is connected to the Internet, it can be accessible from any computing device using a web browser. You won't be able to maintain any video history unless you have a computer configured to save the video capture. The exceptions are those webcams that have internal memory. Typically, you would insert a flash drive in the device and it would record the video to the removable media. The amount of video recorded will depend on the capacity of the flash drive and is normally limited to several hours. It is certainly better if the webcam can be configured to record only when motion is sensed, thereby maximizing the amount of recorded video.

# **Legal Thoughts**

When electronic communications are intercepted, the wiretap laws (state and federal) kick in and they almost all have an exclusionary clause so the evidence will not be admissible. However, evidence from GPS trackers and webcams, while often illegal, generally is not subject to an exclusionary clause (but check carefully in your state to be sure), so it will come in – but the price is that the person who has violated the law may be subject to criminal or civil actions (or both).

### **Final Words**

Since cheating is unlikely to go out of style, the tools used to prove that you have a cheating heart are likely to become increasingly sophisticated. Somehow, the old days of Perry Mason sending Paul Drake off to a motel to observe the cheaters enter and leave the "no-tell motel" seem both quaint and rather innocent. If you conclude, after reading this, that there is almost no way to carry out an affair in secrecy, you're probably right – that is one of the unanticipated side effects of living in the digital era.

Sharon D. Nelson, Esq. and John W. Simek are the President and Vice President of Sensei Enterprises, Inc., a digital forensics, legal technology and information security firm based in Fairfax, Va. (703) 359-0700 (phone); (703) 357-8434 (fax); sensei@senseient.com; www.senseient.com.