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New RFID Technology Allows You to be Tracked WITHOUT Your Knowledge

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Source: RFID Wizards

By invitation, I recently visited a remote facility in northern Virginia to see a demonstration of NOX – a new *Intelligent Perimeter Defense* system deployed by the FBI that uses covert Radio-Frequency Identification (RFID) technology to track people and assets *without* their knowledge.

That's right, using RFID to track people *without* their knowledge. This system is exactly what the privacy advocates have long feared: Big Brother tracking us with spy chips. As Orwellian as this sounds, the undisputed fact is that this system catches thieves and does so at a fraction of the cost of traditional security solutions.

NOX combines high-resolution video pictures and RFID for identification, tracking and tracing, overlaid in real time on a facility map to show the movement of people and assets. The system allows security officers to see theft as it happens, even if the stolen object is inside a briefcase, under a jacket, or stuffed inside a sock.

What makes the NOX system I saw different from traditional security systems is that it uses RFID for clandestine surveillance: RFID readers are hidden inside walls, floors, and ceilings; RFID tags are discretely placed; and only the security personnel know that the system is in place – until the thief gets caught. Then, all the thief knows is that he or she was caught in the act, on video.

"It takes a criminal twelve seconds to defeat a lock or fence. Yet, we spend hundreds of thousands of dollars to create fences that only provide an illusion of security. NOX creates a virtual perimeter that tells us who is penetrating the perimeter, when they are doing it and, where it's happening. With this information, we can respond with the appropriate level of force and prevent further penetration."

A commander with the Naval Criminal Investigative Service (NCIS), who asked to remain anonymous for this article.

There is serious motivation behind the development of NOX in both the government and private sectors. The reality is that traditional security systems are simply not proving to be effective against criminals. Beyond the obvious homeland security concerns, the NOX team places strong emphasis on the impact to our national economy. According to the American Management Association, 95 percent of all businesses are victimized by employee theft. Employees steal over a billion dollars a week from their employers and it takes $20 billion dollars in sales every week just to cover the losses. That's a yearly economic impact of one trillion dollars. Yet, most companies are

Cases handled in US District Court
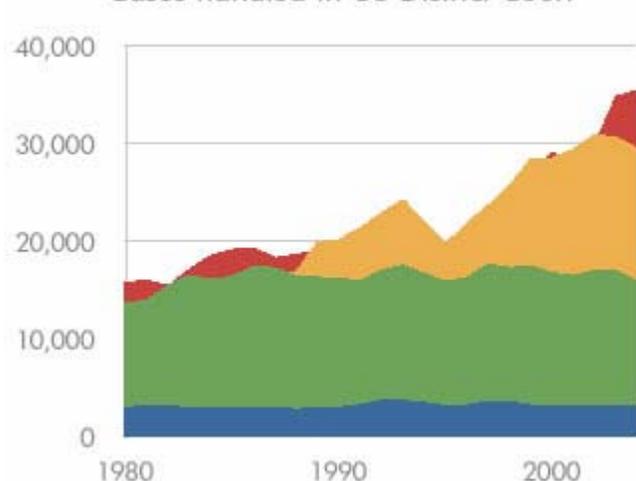
embarrassed to talk publicly about how serious this issue really is. They try to deal with it quietly by sp
with all the money companies spend on security, 80 percent of all employees will be tempted to steal if

This is also placing a huge burden on our judicial system. Public order crime is rising faster than any ot

Privacy advocates will have an extremely difficult argument when facing numbers that motivate goverr
is not to invade privacy, simply protect the innocent. RFID is just a tool in our system. If RFID wasn't a
actuality we do. The right to privacy is important but privacy and anonymity are different. All RFID do

The NOX team has perfected dozens of methods of tagging people without their knowledge.

One of the more covert technologies they employ is *ID-Dust*, serialized dust particles that can be interro
movement. ID-Dust can show if an item was handled or it can even be sprinkled on the floor. People ur
software combines the video surveillance and RFID information to create an association between the II
facility without the person ever knowing he or she is being tracked. While a criminal can easily defeat t
enters an area, plus a complete history of exactly where each person traveled and when.

Combining RFID and High Resolution Video Surveillance Cameras

The system uses video surveillance cameras mounted in obvious locations and others that are hidden. I
monitors; the RFID tags provide a far superior means of triggering alerts. A tag read in a particular loca
personnel's mobile devices. In my demonstration an iPhone received a high definition picture of a theft

I was very fortunate to be given a single screen shot of the NOX Operations Center (below).
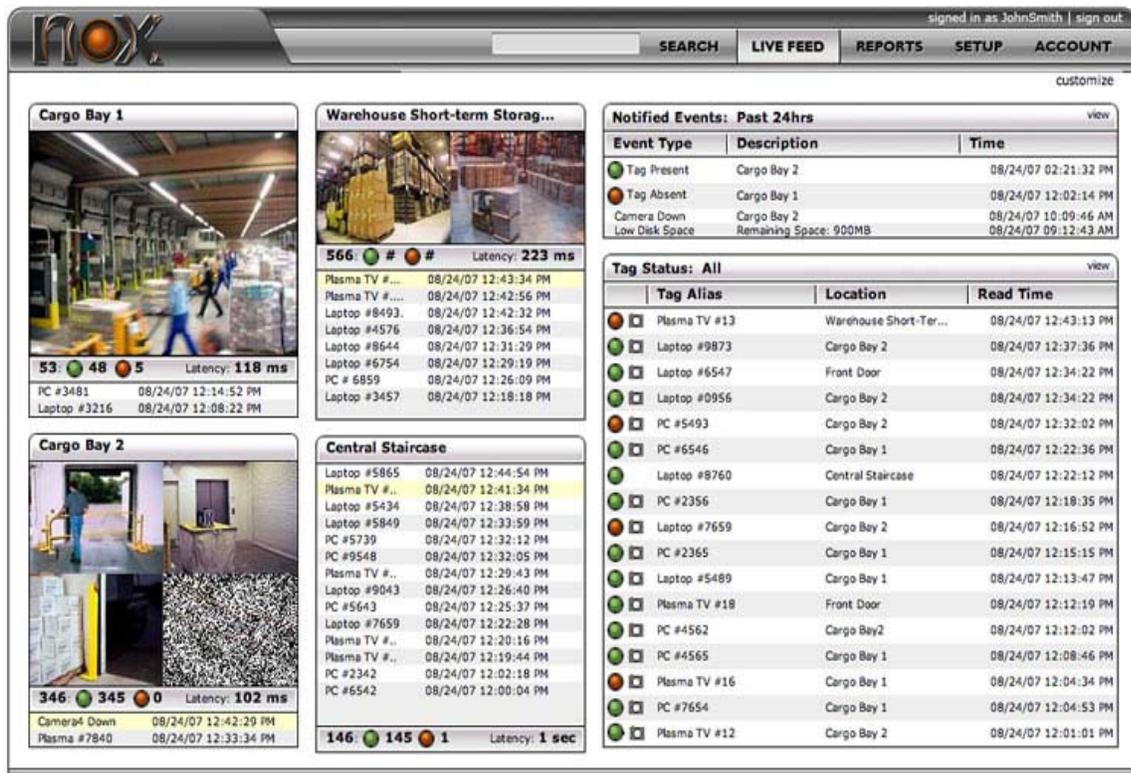
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