

# LAW and ORDER

## 3M VST and EVR

by Kevin Gordon

Call me old fashioned but technology for the sake of technology just doesn't interest me. What I may consider no great deal may be life changing to someone else. For example, my youngsters can't live without their IPODs, while I really don't care whether it can hold 100 or 1000 songs. I need to know what it will do for me before I take an interest.

This is also true with how I view technology and our chosen profession of law enforcement. For example, vehicle based laptop computers are nothing but mobile typewriters unless they are connected to a wireless system and can provide some other service.

Certainly a lot of new items make the law enforcement job easier but then we find things that can truly change how we do things. This includes items previously discussed such as Trimble's T-Ticket mobile software, Project54, L3 Communications' Flashback Digital Video Recorder and the LexisNexis new module that allows agencies to search, locate, and map addresses for sexual offenders.

Some products from 3M also fit in the category. Ask the average citizen what 3M makes and you are bound to hear Scotch Tape. Others will think of reflective items or maybe insulation items. But 3M is so much more and two products they are developing are worth discussing.

As with many vendors and manufacturers, products are being developed in response to the terrorism threat. For years 3M has provided various reflective supplies including items for vehicle license plates. A new technology developed by 3M's Traffic Safety Systems Division introduces a mark in the reflective material that is difficult, if not impossible, to duplicate in an effort to thwart the counterfeiting of plates.

The new product is Ensure™ Virtual Security Thread (VST) and is similar to security marks used in currency to prevent counterfeiting. It is indelible and most importantly, can't be duplicated digitally. The mark is visible and is three-dimensional. It is actually embedded in the reflective surface of the license plate and appears as a double wave pattern. One part appears to float above the plate while the other one appears to sink.

Many officers are familiar with 3M's Ensure™ Emblem, which has been used for years. The Ensure Emblem must be viewed at a specific angle. The new Ensure VST is easier to see and is visible in both nighttime and daytime conditions. Together VST and the Emblem can create an image that is unique for the state (or country) issuing the plates.

Unique, nearly impossible to duplicate license plates are a far cry from just a few years ago. But then again in the recent past we would have never thought about license plates being counterfeited. Seems to me I can remember a time as a young man when you showed you had applied for a plate by hanging a piece of cardboard on your vehicle with "license applied for" on it.

3M is also exploring the area of electronic vehicle registration (EVR) using Radio Frequency Identification (RFID) and wireless technology to electronically identify vehicles and validate vehicle data. Years ago I watched Robocop and saw the barcode license plates. I thought how great it would be to "scan" the vehicle as it went by and just mail the ticket. EVR isn't a barcode in that sense but we're getting there!

With the EVR system, an electronic identification code is created, unique to each vehicle, and a tamper-resistant windshield sticker is installed on the vehicle. The code is linked to the central host database of vehicle and owner information. The EVR system is designed with security in mind and prevents fraudulent use. It could be used to track vehicles in secure areas as well as other transportation areas.

It doesn't take much imagination to see where this will evolve to. Imagine driving your squad with a RFID reader mounted to your dash. Nothing large or obnoxious, but small and almost unnoticeable, like a radar detector used by the public. As you drive around it automatically notifies you of vehicles that are in violation of their registration, vehicles that are not properly inspected, and vehicles that are not properly insured.

Now take it to the next level: a reader mounted in a stationary position on a roadway that automatically checks traffic 24/7/365, detecting out of compliant vehicles and generating citations.

The EVR system can also be used to automatically capture data for on-site reports such as citations and accident reports. Officers can be alerted about important and pertinent vehicle information prior to their approach. On a more basic level, the officers can clear traffic accidents quicker. The sooner the officers can leave an accident scene and return to patrol, the sooner their safety increases.

3M expects EVR to lower annual renewal costs as well as increase revenues and to benefit not only the Departments of Motor Vehicles and law enforcement but also motorists and the general public as well.

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