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TRACKING THIEVES, OR TEENS

## Technology, the Stealthy Tattletale

By CHRISTOPHER MAAG

Initially, it seemed like an easy bank robbery. After stealing \$7,000 from a PNC Bank in Evendale, Ohio, Kenneth Maples climbed into a white [Ford](#) pickup driven by his wife, Jewell, according to a police report. No dye pack exploded, no police sirens screamed in pursuit as the couple's truck slipped into the anonymity of heavy traffic on Interstate 71 just after 10 a.m. on Sept. 14.

But the suspects never had a chance. A Global Positioning System tracking device had been tucked inside the stolen cash, according to the report, allowing a small army of local police officers and [F.B.I.](#) agents to follow the signal from on-ramps and overpasses as it moved south into downtown Cincinnati.

Police put up a roadblock, closing five lanes of traffic. As hundreds of vehicles stopped, police converged on the suspects' truck, sitting just five cars behind the police line.

"It was incredibly precise," said Mark Fisk, a Cincinnati resident who photographed the arrest from his delivery van, three cars behind the suspects.

A technological revolution is making it possible not just to track down escaping bank robbers but to find missing things and people far more quickly and precisely than ever.

The change is powered less by new technologies than the artful combination of existing ones, mainly the Internet, cellphones and G.P.S. satellites. In some cases, the new devices linked to these systems can even detect a theft before it happens.

“This stuff is coming down the pike very soon,” said Jim Van Cleave, vice president of Spectrum Management, which has developed tracking systems for commercial and covert uses since 1980. “The number of potential applications is mind-boggling.”

One new use is tracking teenage drivers. Brian Aladesuyi, 17, received a new Jeep in exchange for a promise: he would never drive it outside his hometown, Kennesaw, Ga. His father, Kayode Aladesuyi, chief executive of the security firm EarthSearch Communications, used EarthSearch’s Web site to map Kennesaw’s boundaries into the Jeep’s onboard computer, surrounding the entire city with an electronic fence.

But when his father took a business trip to Brazil, Brian decided to try his luck, Mr. Aladesuyi said. Brian drove to Marietta, a neighboring town. Seconds after Brian breached the invisible wall, his father received a text message on his mobile phone.

Mr. Aladesuyi sent a message commanding the computer to disable the Jeep’s engine as soon as Brian switched it off. When the Jeep would not restart, Brian had to call his father and confess he had broken their agreement.

“I don’t think Brian really understood I could do that from Brazil,” Mr. Aladesuyi said.

That tracking system became available this spring. The onboard computer costs \$229, installation included, and the service costs \$19.99 a month. Mr. Aladesuyi uses a similar EarthSearch system to disengage the engine of his own Mercedes E500 sedan, making it “virtually impossible” to steal, he said.

Like a host of other location technologies in the works, the money-tracking tools can trace their origin to an initially obscure rule, written into the Federal Telecommunications Act of 1996, which required that new cellphones be able to communicate their location to emergency responders whenever callers dial 911. Some companies planted chips in their phones that communicate directly with G.P.S. satellites. Others use cellular towers to triangulate the signal. With the location systems in place, a number of companies began working on other applications.

“There’s a lot of sexy stuff out there that’s just getting ready for prime time,” said David Mansfield, vice president of Raptor Analytics, a company in Longmont, Colo., that advises banks on security.

Banks began putting the technology to use about two years ago, Mr. Mansfield said. Harry Trombitas, the F.B.I. special agent who leads the bank robbery unit in southern Ohio, said that the G.P.S. devices allowed law enforcement officials to keep close track of missing money. “These things are pretty accurate,” he said. “They can get it down to within a few feet.”

Sometimes the technology allows property owners to detect a theft before it occurs. SC Integrity, a security firm in Bothell, Wash., uses G.P.S. technology and a database of shipping container thefts to safeguard trucking fleets.

If it finds a pattern of thieves stealing, say, cigarette shipments from a certain Texas truck stop, the company can load the coordinates into a G.P.S. module inside the trailer, creating an electric fence around the entire freeway off-ramp, said Denis duNann, the company’s chief executive.

If the truck exits anyway, trucking company dispatchers instantly receive an alert and phone the driver. If the driver lies about his location, dispatchers call the local police and alert them to a possible theft in progress.

“You can sit at your computer and watch him do a U-turn and get right back on the highway,” Mr. duNann said.

Many missing objects, of course, do not involve a crime. Project Lifesaver, a nonprofit group in Chesapeake, Va., fits Alzheimer’s patients and autistic children with radio frequency beacons disguised as bracelets, which help emergency responders find them if they are lost.

Next spring the group will introduce new bracelets, created by Locator Systems, a British Columbia company, that combine radio signals with G.P.S. and cellular communications. That should allow caregivers to establish a zone where patients can safely wander, said Jim McIntosh, the company’s chief executive. If patients wander off, emergency crews could receive more specific information.

But most of the work is aimed at recovering stolen property, potentially saving billions.

OnStar, the G.P.S.-based navigation system offered by [General Motors](#), will start a “stolen vehicle slowdown” service next spring to help avoid dangerous high-speed chases. If an equipped vehicle is stolen, police can ask OnStar to send a wireless message to the onboard computer, cutting the engine’s power.

The driver, said Chet Huber, OnStar’s president, will have time to pull off the road safely. After that, the thief is on his own.

*The Talking Business column by Joe Nocera, which normally appears on this page, will return in two weeks.*