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**The RadTruck is simple to use,** New Jersey Trooper Dave Gatto says. Its hits, too, are often easily explained: kitty litter, bananas, and radioactive medical treatments.

## This police radar targets terrorism

By Sam Wood  
INQUIRER STAFF WRITER

It looks like any soccer mom's SUV. Just another gas-guzzling Chevy Suburban roaring up I-295 near the Delaware Memorial Bridge.

But behind the tinted windows, an alarm whoop-whoop-whooped, signaling a state trooper patrolling New Jersey's highways for terrorist nuclear threats. A graph on a small computer monitor hanging over the dashboard turned ominously red.

"Thorium-232," Trooper Dave Gatto said as he glanced at the screen. "Don't worry. It's a naturally

occurring radioactive element. It gets concentrated around the storm drains. It's not dangerous."

The \$200,000 worth of high-tech hardware stuffed into the back of the cavernous SUV can sniff out concealed radioactive material the size of a grain of sand, or, as police have learned, people who have been exposed to some cancer treatments.

Called a RadTruck, it's part of a fleet of radiation-detecting SUVs that New Jersey pressed into service in March — becoming the first state in a federal pilot program that aims to detect terrorist nuclear material before it can be detonated.

The Secret Service owns one RadTruck, according to defense industry experts. New York City has used similar rigs since the 2004 Republican Convention. But the Big Apple's mobile nuke sniffers — over-size pickup trucks with exposed machinery mounted on the beds — lack the stealth of the Garden State's.

Pennsylvania has seven Ford F-150 pickup trucks outfitted with radiation sensors, but they're primarily used to investigate suspected radiation releases from nuclear power plants, a spokesman for the state Department of Environmental Protection said.

Jersey's RadTrucks are remarkably simple to use, said Gatto, who hasn't taken a science class in more than 20 years. After 10 hours of training, he said, he could tell the difference between the radioactive signatures emitted by uranium and cesium, plutonium and kitty litter.

"Yep, kitty litter," Gatto said. "The clay has traces of uranium and thorium in it that can set off alarms. Bananas get flagged, too, because of the potassium in 'em."

Each SUV has a device called an adaptable radiation area monitor that can sense any source of radiation, even if the material is in a lead-shielded container, Gatto said.

So far, the RadTrucks haven't tripped across any terrorists. They have, however, snared passengers on buses on their way back from Atlantic City.

"We've had a couple of hits," Trooper Bobby Benton said. "Some older people are radioactive because of medical treatments they've had."

The trucks' radiation sensor is so sensitive it can tell whether a passing motorist has recently had a stress test or a barium test, troopers said.

If the RadTruck signals a real threat, the trooper will call for state police backup to pull over the suspect vehicle and then lead it to an isolated spot for closer inspection.

"If there's a hit, you don't want to cause a big to-do on the interstate," Gatto said. "If it is a dirty bomb, you want to get it out of harm's way."

No radiological terror device has ever been discovered in the United States, said Jeremy Tamsett, an analyst for the Center for Terrorism and Intelligence Studies based in San Jose, Calif.

"Or at least nothing has ever been disclosed," he said.

"But the real purpose of these radiation detection systems is prevention," Tamsett said. "You're trying to dissuade terrorists from even attempting to bring the stuff close to cities."

New Jersey's small fleet of RadTrucks — authorities didn't want



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**New Jersey Trooper Dave Gatto** tests radiation detection equipment inside a modified SUV called a RadTruck. The equipment can sense concealed radioactive material the size of a grain of sand.

to discuss the exact number — now roam the entire state. Because of its population density and proximity to New York, North Jersey gets most of the attention.

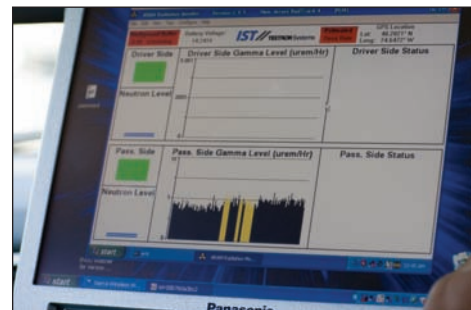
"That is where the greatest risk is," said a spokesman for the state's Department of Homeland Security and Preparedness. "But the RadTrucks are just one part of the region's strategy to interdict radiological materials."

One is kept parked and running at Giants Stadium when the NFL team plays at home, a state police spokesman said.

The SUV-mounted detectors are among thousands of devices deployed across the country to search out radioactive terror threats since the Sept. 11, 2001, attacks.

As part of a \$1 billion federal effort to reduce the threat of nuclear terrorism, the Domestic Nuclear Detection Office last year announced a \$3.2 million program to install radiation sensors at highway weigh stations in seven Southeastern states.

Eventually "a web of radiation detection systems" will operate from coast to coast, said Vayl Oxford, the Nuclear Detection Office director.



**A RadTruck monitor** displays gamma readings from nearby. The high-tech software costs \$200,000.

Customs agents at airports and border crossings already wear pager-size radiation detectors. And large monitors scan cargo at mail facilities and at border crossings, a Department of Homeland Security spokesman said.

By the end of the year, about 900 radiation monitors will be installed at the nation's 22 busiest seaports, scanning most incoming cargo containers, the DHS spokesman said.

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