

# How A Little-known Project Paid Off In Oklahoma City Desert Explosions Have Been Used To Teach Agents About Car Bombs. Investigators Quickly Read The Clues.

By Steve Goldstein, INQUIRER WASHINGTON BUREAU

By doing something your mother and the police always told you not to do: playing with fireworks.

Eberhardt is a member of one of the bureau's National Response Teams (NRT), and he has been trained under a little-known project code-named DIPOLE MIGHT.

For the last 11 months, DIPOLE MIGHT has been blowing up various types of car bombs in the New Mexico desert and examining the signatures they leave.

With expertise from the project, blast investigators gained valuable time in piecing together the clues that led them to Timothy McVeigh, the alleged Oklahoma City bomber.

Eventually, DIPOLE MIGHT will be used to create computer models for vehicle bombs.

"This type of large-scale testing has never been done before," said Ralph Ostrowski, chief of the ATF's explosives division. "It's benefited our agents who are assigned to our national response teams."

ATF sent two of its four regional response teams to Oklahoma City after the blast. There are 20 to 25 people assigned to each team, and the team members formed part of a total ATF contingent at the bomb site - including chemists and field agents - that eventually exceeded 200.

Much has been learned since DIPOLE MIGHT began tests in July. Eight vehicle bombs have been exploded, carrying loads ranging from 50 pounds of C-4 synthetic explosive to 1,000 pounds of ANFO.

Current plans call for a 5,000-pound "shot" sometime early this fall, a blast that will closely parallel the size of the Oklahoma City bomb.

Investigators measure crater size, dispersal of debris, blast "overpressure" (the distance at which damage is caused), fragment distribution and effects on different road surfaces. The size and composition of the bombs produce different results.

Testing is conducted under a so-called Interagency Counterterrorist Research Group, whose members include the ATF, the Army Corps of Engineers and the Pentagon's Defense Nuclear Agency.

Famed for nuclear testing, the huge White Sands Proving Ground - spanning about 120 miles north to south in the desert - is about a two-hour drive south of Albuquerque.

For years, the ATF has been testing smaller types of bombs - five to 10 pounds of dynamite, say - in car explosions.

After the 1993 World Trade Center van bombing, which killed six people and caused enormous damage, officials decided they needed to simulate larger, terrorist-type explosions.

So DIPOLE MIGHT was born on a 10,000-square-foot concrete pad at White Sands last July.

Testers have blown up full-sized 1990 Chevy Caprice sedans and 1985 Dodge vans. A van was used for the 1,000-pound ANFO shot, Ostrowski said.

Two additional 1,000-pound tests are planned this year, one each with C-4 and ANFO.

Ostrowski said the object of DIPOLE MIGHT is to develop computer software that will allow investigators to plug in early data from suspected vehicle explosions and obtain reliable information on a bomb's makeup.

"This has never been done before, providing a computer model," said Ostrowski. "It will even affect how we design buildings in the future."

ATF explosives enforcement specialist David Shatzer, who has monitored the tests, said the project is also analyzing the residue of blasts. Investigators place different substances around the vehicles, such as wood and street signs.

Some of the blast residue tends to stick to those surfaces, said Shatzer.

A key aspect of the testing is "component recovery." According to Shatzer, some vehicle components always survive these blasts and can provide valuable clues.

Shatzer declined to name the "nearly one dozen" parts that remain intact in such explosions, but other sources said vehicle axles are usually recoverable, as was true in the World Trade Center bombing.

Shatzer said he expected the same parts would also survive a 5,000-pound bomb blast.

The explosive materials themselves have different signatures. "ANFO produces more pushing and heaving, while C-4 has more brisance or shattering effect," said Ostrowski.

Each blast is videotaped and monitored for temperature and seismographic effects.

Shatzer said the blast pressure from a 1,000-pound ANFO bomb can be felt almost a mile away. Temperatures 100 feet from such a blast will rise by at least 50 degrees, said Shatzer.

So far, nearly 100 people assigned to NRTs have been trained at DIPOLE MIGHT tests.

Testing is expensive. The interagency group is attempting to find funding for the 5,000-pound test, which will cost more than \$125,000. Shatzer is hoping to conduct the test in the first half of August.

"If we get the money, I'd like to do 10,000-, 20,000- and 40,000-pound bomb tests, too," said Shatzer.

Aware of the implications of his wish list, Shatzer said he just wanted to be prepared by having the best information possible.

Only the size of a van might impose limits on a criminal bombing, he said, not a terrorist's imagination.