

The Robot That Took Out the Dallas Killer

Tough, sturdy, and made in the USA, this machine prevented further loss of human life

Rick Docksai

July 10, 2016

While the U.S. military has been striking targets via armed robots for more than a decade, <u>last</u> week's police shooting in <u>Dallas</u> marked a first: The <u>police</u> used a deadly armed robot.

After the Dallas police had cornered their suspect in a garage and spent several hours trying to negotiate him into surrender, they sent in a robot that carried and detonated a bomb. The suspect died instantly.

The Dallas Police Department keeps several bomb-carrying robots at hand and typically uses them to destroy explosives and suspicious packages that may carry explosives. In this case, officers used a machine to destroy a gun-wielding human suspect.

"Technology is a tool. Tools are used the way they're designed and then people improvise and find new uses for them," said Peter Singer, a New America Foundation strategist and senior fellow who has written extensively on robotics in military and civilian settings. He additionally tweeted: "I'm not going to Monday morning quarterback on right/wrong of how/why used."

In a news conference Friday morning, Dallas Police Chief David Brown said the officers resorted to the robot to avoid risking severe harm to any more officers. The sniper, identified as Micah Xavier Johnson, a former Army reservist who proclaimed that he wanted to "kill white people, especially white police officers," *shot and killed five police officers on Thursday night* and wounded a number of others, as well as civilians.

"We saw no other option but to use our bomb robot and place a device on its extension for it to detonate where the subject was," said Chief Brown. "Other options would have exposed our officers to grave danger." The Dallas Police Department did not respond to requests for comment on the technology.

The robot used in the Dallas standoff reportedly was a Northrop Grumman Remotec Andros, a remote-controlled bomb disposal device used by police, military, and other first responders

around the world. It is wheeled, weighs close to 500 pounds, and mounts various sensors and a robotic arm with grippers, according to Singer in a piece he wrote for CNN.

Key Facts About Andros Robots

Preferred choice for hazardous duty operations

Help confront incidents rapidly and decisively

Have superior versatility, supporting multiple weapons, detectors and/or sensors

Have a rugged durability, can be ready to handle any situation at a moment's notice

Manufactured in the U.S. and backed by world-class training, post-sale support

Source: Northrop Grumman

It costs approximately \$200,000. The Seattle Police Department owns one as well, and its accessories and weapons include a 12-gauge semi-automatic shotgun, a water cannon, hooks, blades, talons, and an X-ray system, according to an article in The Intercept, which referenced a 2009 presentation by the Seattle police department's bomb squad unit.

Robots have been a growing presence in police departments in recent years. During a 2015 standoff in San Jose, California, police used a bomb-disposal robot to deliver a phone — and a pizza — to a man who threatened suicide on a highway overpass, IEEE Spectrum reported. But the robot did not unleash lethal force.

In 2014 in Richland County, Ohio, police used a robot to monitor a robbery suspect during a nine-hour standoff. They then used the robot to spray tear gas at the subject so that officers could safely enter the building. Again, the robot was used for intelligence, not force.

That was true in a 2012 Greensboro, North Carolina, case as well, when police used a pair of robots to end a standoff with an armed suspect who had barricaded himself inside his home. They first sent in a Qinetiq Dragon Runner, an all-terrain roving machine with tank-like treads that was first used by U.S. Marines in Iraq. The robot ascended the steps, entered the home, and provided audio and video intel to officers outside. A second robot then entered the home and offered two-way communications between the cops and the suspect. The standoff ended peacefully when the police coaxed the suspect out of the house.

Police in the United Kingdom have been using drones to spot individuals in the act of littering or vandalism. And Brazilian police deployed Packbots, which carry cameras and mechanical arms for both surveillance and bomb disposal, to help keep the peace during the 2014 World Cup games.

In the years ahead, more robots with deadly-force capabilities could be entering police work. Matthew Feeney, a policy institute at the think tank Cato Institute, said many types of military weaponry have made their way into civilian police departments, such as flash-bang grenades that SWAT teams now use on raids. More recently, police departments have applied for permission to use aerial drones.

"Robotics technology is likely to improve in coming years. And as robotics improves, it will become easier for police to use robotics to deploy lethal force against suspects," Feeney said. He also voiced some worries: "What if, instead of flash-bang grenades, it's robotic drones conducting SWAT raids? I'm worried about mission creep, that these things could become a new normal."

He did not condemn the Dallas police decision in this instance. Clearly, lives were saved, and who knows how much longer a tense and potentially deadlier situation could have dragged on. He cautioned that, as with any technology, there is a danger of overuse.

"As these devices become easier and more accessible to deploy, we should worry about them being deployed as the first tool," he said. State and federal lawmakers have debated and enacted laws governing how and when police use firearms.

Feeney hopes to see more discussions emerge on when and how police use robots. "I think technology, by itself, is morally neutral. It's made moral or immoral by good or bad rules. This technology can be used in good ways, but only with the right policies in place," he said.