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### Jamming Terrorists with Technology

Detonating an improvised explosive device using a remote trigger like a cell phone or remote-controlled car is a fairly simple task. Preventing the bomb from exploding using localized jamming technology is an equally simple task, but currently first responders at the state and local levels are not given access to these types of technologies, says Howard Melamed, president and CEO of Cellantenna Corp, which distributes similar devices.

"The local bomb squad...has nothing to prevent the device from going off," says Melamed. The type of technology Melamed describes would jam the downlink of a cell phone to a specific package. So, if a bomb were suspected in a backpack, as might have occurred if the bombs used by the London subway bombers had been detected before they were detonated, the jammer would interfere only with those signals going to the backpack. If police have not identified a suspicious package or if they suspect that more than one bomb could be present, the technology could also be used to jam larger areas, such as an entire building or a tunnel.

To target a specific package, the jammer must be within 100 feet of the identified object. But, in many cases, 100 feet is not outside the blast zone, so robotic devices have been designed specifically to deliver the jamming device to the package, without endangering police or bomb squad responders.

The jamming technology only blocks communication on low-level frequencies. First-responder communications, which typically are carried on high-level secured frequencies, are preserved, says Melamed.

Currently, jamming technology is tightly regulated by the Federal Communications Commission. Federal government law enforcement agencies are the only ones with access to this type of technology.

Police groups, such as the national association of Chiefs of Police, have said these types of devices would be helpful, but since they are tightly regulated the group's spokesperson did not feel comfortable speculating further on their potential usefulness to first responders.

The problem, notes Melamed, is that the FBI agents or other federal law enforcement officials with jamming technology may be called to a scene after a bomb has already exploded. Since they arrive much later than the first responders, this precludes the potential benefits of jamming to prevent any secondary devices from being set off.