Emergency Response Center Contributes to Homeland Security

With growing national and state interest in homeland defense, researchers at the Center for Emergency Response Technology, Instruction, and Policy (CERTIP) at GTRI are assisting local and regional agencies in preparing for terrorism threats. The Center is a public-private partnership that fosters basic and applied research to enhance emergency response and consequence management for both natural and human-caused disasters.

Researchers have been working closely with representatives of Georgia’s Homeland Security Task Force, primarily the Georgia Emergency Management Agency and the Department of Public Safety, to develop affordable technologies and training for first responders. Technologies include a biosensor for detecting biological contaminants, such as anthrax, and the Medical Reachback System for Internet transmission of vital patient information from the field to a command post.

Additionally, CERTIP is collaborating with University of Georgia researchers in a national resource center for agricultural counter-terrorism research and education. The Center for Security of Agriculture and Environment provides scientific expertise to address the intentional use of pathogens and chemicals to create terror. Target threat areas include animal and food production, distribution centers, fields, water supplies, and the atmosphere.

In addition, CERTIP researchers are assisting the City of Atlanta Security Task Force with technologies to improve personnel and passenger safety at Atlanta’s Hartsfield International Airport. Projects include development of a knowledge management system and a comprehensive physical and environmental security system.
Hazmat Training
Gets a Boost

Growing concern about the national threat posed by terrorism has prompted increased activity and visibility for GTRI. In March 2002, President George W. Bush visited Georgia Tech to observe an emergency response exercise highlighting the hazardous materials training and technology being developed at GTRI for use by first responders. Exercises such as this, carried out by local emergency personnel and researchers at the Center for Emergency Response Technology, Instruction, and Policy, are designed to enhance response capabilities.

Also in 2002, the Georgia Emergency Management Agency designated the GTRI training program as the Hazardous Materials Training Center of Excellence. The award means that GTRI now will conduct hazardous materials training for the state’s fire departments, thus ensuring more effective and coordinated responses.

Finally, a collaborative effort by GTRI, the Georgia Army National Guard, the Georgia Bureau of Investigation, and the Agency for Toxic Substances and Disease Registry is currently under way to develop the Georgia Emergency Response Training and Operations Center. This hazardous materials training and technology test bed north of Atlanta in Cobb County will consolidate the assets of federal, state, and local agencies in one complex.
GTRI recently assumed a new role as leader of a technology consortium for the National Guard Bureau Counterdrug Office. The consortium was formed to support the agency’s counter-drug efforts across the country. It involves 21 other organizations and is providing unbiased technical expertise and technology to the National Guard, and law enforcement and civil support agencies.

Researchers are leading a technology consortium that supports the activities of the National Guard Bureau’s Counterdrug Office. Among GTRI's contributions are a digital mapping portal and a decision support system that captures, records, and generates timely information for law enforcement agencies.

The consortium operates under a five-year, $46 million contract with Georgia Tech. Researchers have received funding from the National Guard, U.S. Southern Command, the Central Measurements and Signatures Intelligence Office, the U.S. Army Corps of Engineers, and the U.S. Air Force.

This major effort builds on the successes of the GTRI-developed Counterdrug Geographical Regional Assessment Sensor System. The program includes a digital mapping portal and a decision support system that captures, records, and generates timely information for law enforcement agencies.

Key technologies in the system include geographical information systems, electro-optical sensors, remote sensing, radios and streaming video communications, virtual reality, and the information technology architecture to integrate and interface these technologies with the National Guard and its customers.
First Responder Technologies Demonstrated for President Bush

New technologies and training that may help emergency workers improve their response to disasters prompted a visit from President George W. Bush to the Georgia Institute of Technology in March 2002. Researchers at the Center for Emergency Response Technology, Instruction, and Policy (CERTIP) demonstrated technologies they are developing to enhance response capabilities. During the President's visit, Atlanta area emergency workers and CERTIP employees staged a mock chlorine gas release. President Bush and Homeland Security Director Tom Ridge watched, along with Georgia Tech President Wayne Clough (center in photo above), Tom Bevan, director of CERTIP and Georgia Tech's Homeland Defense Initiative (second from right in photo above) and GTRI senior research scientist Kevin Kamperman (left in photo above).